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Segmenting Chinese tourists by the expected experience at theme parks

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Abstract

In this paper we propose an experiential approach to tourist segmentation aimed at overcoming the limits of both socio-demographic and context-specific approaches widely adopted in literature and in practice. In this study, segmentation is carried out based on expected experience of Chinese tourists in Shanghai World Expo. Segmentation reveals four tourist clusters with different interests in their experience visiting World Expo. The clusters showed insignificant differences in demographics, but proved to be powerfully discriminant in tourists' satisfaction and loyalty, which affirms the potential of tourist experience being a segmenting variable. Moreover, thanks to the analysis, an evaluation of Shanghai World Expo's success in terms of visitors' satisfaction is provided.

Keywords: Visitor Experience; Segmentation; Visitor Satisfaction; World Expo;

1. Introduction

Segmentation is a key process for developing more efficient and effective tourism marketing plans, hence to maximize the benefits for tourism facility managers, policy makers and communities (Brougham & Butler 1981), as well as to properly shape corporate strategy (Lamberti & Lettieri 2009; Ailawadi et al. 2001; Juaneda & Sastre 1999; Lamberti & Lettieri 2011; Lamberti and Noci 2012) and also relationships within functional areas (e.g., Gentile et al. 2007; Lamberti and Pero, 2013).

Several segmentation approaches have been provided in time, and there is not any absolutely correct way of segmenting: the aspects such as methods and bases for segmentation should be determined, in fact, by the strategic purpose and should reflect the strategic view of the organization segmenting the market (Wedel & Kamakura 2002; Lamberti and Noci 2009b). For this reason, many variables have been utilized so far in segmentation. Whereas traditional, product-based segmentations have proved to be poorly effective, demographics have been one of the most commonly used segmenting variables because of its simplicity and intuitiveness (e.g. Juaneda & Sastre 1999, Namkung & Jang 2009). However, there have been increasing arguments that demographics is not fully reliable or adequate as a segmenting variable (e.g. Ailawadi et al. 2001, Mykletun et al. 2001, Tkaczynski et al. 2009), as often motivations, values and attitudes are better predictors of behaviors (Leisen 2001). Psychographics, i.e. the variables

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and attributes relating to personality, values, attitudes or lifestyles of a population (e.g. Silverberg et al. 1996), as an alternative background variable for segmentation, is receiving increasing attention, especially in tourism research.

In time, several different psychographic variables have been considered for segmenting: motivation to travel, satisfaction, lifestyle, benefits sought, and so on (Kau & Lim 2005, Prayag 2011, Füller & Matzler 2008, Chung, et al. 2004). Their common trait is the idea of segmenting according to the importance attributed to a series of ad-hoc parameters developed according to the specific setting of the study.

Hence, finding sound theoretical backgrounds for grounding segmentation analysis may provide tourism managers and researchers with more powerful and generalizable tools for interpreting tourist behavior. Moving from this principle, over the last few years, tourist behavior has been increasingly analyzed by scholars under an experiential perspective (e.g. Quan & Wang 2003, Oh et al., 2007, Yuan & Wu 2008). Yet, while literature has mostly looked at tourist experience as a variable through which satisfaction and propensity to re-visit were analyzed (e.g. Hosany & Witham 2010), quite surprisingly customer experience has seldom been considered as a segmenting variable.

The objective of this paper is to provide the results of an exploratory study aimed at understanding whether and how an experience based segmentation may provide insightful information to support tourism planning and marketing. We will do that through the analysis of the outcomes of a survey conducted on a sample of Chinese visitors at 2010 Shanghai World Expo. In this way, we aim at providing a twofold contribution: (i) a testing of the ability by experience-based variables to identify clusters of tourists differently sensitive to tourism stimuli and accordingly, differently satisfied by the same stimulus; (ii) an evaluative model of the overall visitor satisfaction at the 2010 Shanghai World Expo, which has been the largest event in humankind in terms of number of visitors (over 84 million), answering to recent calls in literature (e.g. Lamberti et al. 2011).

The rest of the work is articulated as follow: at first, we will summarize the theoretical and conceptual background of our study, in order to highlight the experiential variables adopted in the study. Then, we will introduce the research method of the study and the results, suggesting interpretations and guidelines for further refinement of the segmentation method. Finally we will briefly review the satisfaction data about the World Expo, to provide an overview of its ability to fulfill the visitors' requirements.

2. Framework

2.1. Theoretical Background: Experiential Marketing

Through experiential approaches to the analysis of customer behavior have been long debated in literature (e.g. Holbrook & Hirschman 1982), the importance of customer experience has been increasingly recognized by researchers and practitioners just recently: moving from competitive and macro-economic arguments, scholars have supported the idea of moving from an analysis of purchase decisions based on specific product-level features to an interpretation of customer behavior as a response to a comprehensive and holistic set of rational and irrational variables able to bring customers memorable experience (Pine & Gilmore 1998, Gentile et al. 2007, Brakus et al. 2009, Lamberti and Noci 2009a). In this perspective, organizations stimulate customers with sensory, cognitive, emotional and behavioral stimuli (Schmitt 1999) trying to make customers sense, feel, think and act in a way that is desirable and memorable (LaSalle & Britton 2003). Previous studies on customer experience have all suggested its multi-dimensionality and the centrality of customers' personal perception (e.g., Unger & Kernan 1983, Holbrook & Hirschman 1982), which suggests how the importance attributed to the different experiential stimuli may actually represent an interesting segmentation variable. This is the main assumption at basis of our work.

In this study, we endorse the Gentile et al.'s (2007) approach, as it makes it possible to analyze not only the kind of experience looked for by customers, but also the constituting elements customers value the most, and this seem a more suited viewpoint for approaching a segmentation. As a consequence, in our study, we characterize visitor's experiential expectations according to the importance attributed to four main dimensions:

- Sensory experience: related to elements that can be seen, heard, touched, smelled or tasted
- Emotional experience: related to the affective self and the feeling of the customer

- • Cognitive experience: related to the conscious-self of the customer, the acquisition of new knowledge, etc.
- • Pragmatic experience: related to the active engagement in the representation/experience

2.2. Context of the study

We set our study in the context of a theme park within a Mega-Event, such as the World Expo Park during Shanghai World Expo 2010. Our choice is motivated by a threefold argument. First, theme parks created a 'fantasy world' that aimed to bring their visitors escaped and elevated experience from their daily-lives (Milman 2001). Therefore customer experience had always been essential to theme parks. Not surprisingly, theme parks play an important role in tourism worldwide. In 2010, despite the widespread economic crisis, the attendance to theme parks had still in general increased, especially in Asia, by 7.3%, where China showed the strongest growth (TEA/AECOM 2011). Second, Chinese tourism market is by far the most interesting worldwide and relatively few is known about the perceptions and expectations of Chinese tourists (e.g., Pan et al. 2010, Lee et al. 2011, Sparks & Pan 2009). Thirdly, the 2010 World Expo has been the largest event in the history in terms of number of visitors (over 84 million in 6 months), and literature has expressed calls for understanding whether such anticipation around the event and attendance during the event has actually generated satisfaction (Lamberti et al. 2011).

These arguments depict our context as an ideal research locus for investigating tourist expectations and satisfaction moving from an experiential point of view.

2.3. Methodology

Our study involved 510 Chinese visitors of the 2010 World Expo, which attended the event for the first time in the week between September 20 and 24, 2010. They were randomly selected at the entrance and asked to fill a first questionnaire aimed at measuring the importance they attributed to a set of experiential stimuli and to pass by the same gate at the exit, where they were required to fill a satisfaction questionnaire about the same stimuli. This ensured us to avoid any importance attribution bias, which leads respondents to attribute higher importance to the factors which have particularly satisfied/dissatisfied them. Each customer was identified through a numeric ID in order to preserve anonymity. The contact with the visitors was managed by trained Chinese mother-tongue personnel. The questionnaires were self-compiled by the visitors and visitors were provided with small gifts as an incentive for participation. Seven questionnaires were unusable, leading us to obtain 503 valid responses.

2.4. Measures

The identification of a comprehensive, though parsimonious, set of experiential stimuli followed the procedure suggested by (Churchill 1979) for developing solid marketing constructs. We essentially moved from the experiential stimuli framework by Gentile et al. (2007) to define a set of items specifically thought for the specific context of theme parks; to do this, we have reviewed previous literature on theme park segmentation to identify a broad set of stimuli: this led us to identify 26 possible items. We conducted a first study aimed at reducing the size of the scale. First, we conducted interviews with six marketing and tourism management professors, as well as two expert consumer behavior researchers in China and in Italy to identify overlapped and superfluous items. 10 items were dropped after this scoping study, leading to 16 items (5 for sensory experience, 4 for emotional, 5 for cognitive and 2 for action experience).

Then, a scoping study on 228 Chinese students at the undergraduate and graduate level was conducted to assess the reliability of the importance scale. Confirmatory Factor Analysis (CFA) was conducted in order assess the goodness of the conceptual framework. Results of the 5-factor solutions were widely satisfactory (adj. $\chi2df=116=175.478$, $p<.001$; $CFI=.966$; $TLI=.960$; $RMSEA=.047$, $p=.60$; $SRMR=.043$). All the factor loadings were above 0.6, and Cronbach alpha for the factors exceeded 0.7 for all, excluding 'action experience', which was slightly below (.678); nonetheless, the construct being constituted by two items only, Cronbach alpha underestimates the reliability (Nunnally 1969), so we tested that the Average Variance Explained (AVE) by each

factor exceeded the 0.5 threshold (Hair, et al. 2005) (sensory=. 524; emotional=. 513; cognitive=.534; action=.528), ensuring reliability.

The survey was complemented with a section investigating demographic variables, in order to explore whether the experience-based segmentation may this approach to segmentation intended to provide proactive, practical, and precise suggestions to the management of the World Expo regarding positioning, targeting, and even operational tactics. It also intended to provide in general an alternative view of segmenting a market.

3. Results

Following previous studies aimed at segmenting tourists according to psychographics, responses were segmented through a K-means cluster analysis (Kau e Lim 2005), according to the importance attributed to the different experiential factors (treated as summated scales). Five cluster analyses were carried out and generated solutions of 3 to 7 clusters. The solution with 4 clusters was the best one in terms of Calinski-Harbasz Pseudo-F index as indicated in table 1. The standardized importance attributed to the different experiential dimensions is described in table 2.

Table 1 Cluster analysis-stopping rule

Number of Clusters	3	4	5	6	7
Calinski-Harbasz Pseudo-F Index	256.23	262.94	230.49	200.46	208.42

Table 2 Importance attributed to experiential dimensions by clusters

Cluster	n. (N=503)	Experiential Dimension*			
		Sensory	Emotion	Cognition	Action
1. Involved	153	0.97	1.08	1.13	0.54
2. Indifferent	95	-1.21	-0.99	-1.24	-1.35
3. Introvert	138	-0.29	-0.13	-0.17	-0.26
4. Extrovert	117	0.05	-0.44	-0.27	0.7

*Cluster analysis was performed on the standardized scores of the importance attributed to each experiential dimension. The original score ranged from 1 being 'Irrelevant' to 5 being 'Fundamental'

Analyzing the data, it is possible to depict key characteristics of each factor:
- Cluster 1: Involved cluster. This cluster attributed relatively high importance to all the experiential dimensions, which suggested their high involvement in the experience visiting Shanghai World Exposition
- Cluster 2: Indifferent cluster. To the opposite, this cluster attributed relatively low importance to all the experiential dimensions, which suggested that they were not particularly interested in the experience of visiting Shanghai World Exposition from the beginning
- Cluster 3: Introvert cluster. Comparatively, this cluster attributed higher importance on the experiential dimensions of emotion and cognition, which suggested they were more concerned with their own feelings and thoughts during the experience
- Cluster 4: Extrovert cluster. This cluster attributed relatively higher importance on the experiential dimensions of sensory and action, which suggested that they were more concerned with the physical and social environment during the experience

A discriminant analysis was carried out to test the existence of possible demographic elements anteceding the belonging to a specific cluster. Interestingly, none of the demographics investigated in the study resulted a predictor of cluster attribution, testifying how the importance attributed to the different dimensions of the experiential vector is generally not dependent on demographics.

In order to verify that the clustering proposed is actually a powerful discriminant of some tourist behavior, discriminant analysis through ANOVA was performed also on the satisfaction with respect to the different experiential dimensions, intention to revisit, category attitudinal loyalty and intention to recommend peers to visit

the Expo after the visit. As shown in table 3 and table 4, different target demonstrated significantly different levels of satisfaction with respect to the experiential performance of the World Expo: Involved visitors showed the highest level of satisfaction on all the dimensions, while introvert were satisfied by the action and emotional experience more than extrovert, which in turn were more satisfied by sensory and cognitive experience. ANOVA has also shown how involved visitors, the most satisfied, actually also showed higher attitudinal loyalty both for the Expo and the theme park category, supporting the overall reasonability of the predictor power of this segmentation when analyzing the relationship between satisfaction and loyalty.

Table 3 ANOVA of Satisfaction on experiential dimensions by cluster

Cluster	Experiential Dimension*			
	Sensory	Emotion	Cognition	Action
Involved	4.10	3.85	3.98	4.11
Indifferent	3.21	3.16	3.16	3.31
Introvert	3.46	3.52	3.38	3.61
Extrovert	3.67	3.48	3.40	3.55
F	52.24	21.23	37.29	28.31
Prob>F	<0.001	<0.001	<0.001	<0.001

* The scale of satisfaction ranged from 1 being 'Much worse than I expected' to 5 being 'Much better than I expected'

Table 4 ANOVA of visitors' loyalty by cluster

Cluster	Loyalty Dimension*		
	Intention to return	Categorical loyalty	Intention to recommend
Involved	0.42	0.62	0.62
Indifferent	-0.59	-0.70	-0.68
Introvert	-0.11	-0.12	0.11
Extrovert	0.05	-0.10	-0.40
F	23.68	45.41	54.07
Prob>F	<0.001	<0.001	<0.001

4. Discussion

The results of this study support the idea that an experiential segmentation may provide interesting insights into the tourist behavior, especially by matching importance and satisfaction in predicting attitudinal loyalty. It is very remarkable that the segmentation provided detects clusters that are substantially indifferent in terms of demographics, testifying once more how demographics-based segmentation is decreasingly powerful in anticipating tourist behavior (Guo et al. 2007). This outcome, remarkably, puts into question some established piece of knowledge about Chinese tourism behavior, which attributes a predictive role of demographics in identifying satisfaction drivers and levels of expectations when traveling (e.g. Yu & Weiler 2001).

Further, the study suggests that the experiential stimuli are not to be considered in trade-off, but rather that different tourists may attribute high or low levels of importance to all of the experiential dimensions, suggesting that a link exists between the experiential importance attributed and the overall level of involvement in the experience.

These results suggest that actually experience may represent valuable theoretical lenses through which approaching the problem of segmentation in tourism, and moreover, being our approach non context-specific provides a potentially replicable tool at least for further segmentation analysis in theme parks. Of course, the main limitation of the study lies in its being based on a single case: we warmly encourage further research adopting the scale in different contexts to observe its statistical reliability and usefulness.

Results show quite clearly that Shanghai World Expo was not an extremely satisfactory event for visitors: this can be observed by analyzing, for instance, how the average satisfaction exceeded the threshold value of 4 on 5 just for involved (hence the most enthusiastic visitors), while it just episodically exceeds 3.5 for the other cluster. A general trait in the satisfaction expressed lies in the generally greater appreciation of the visceral and behavioral

stimuli provided by the Expo (hence, sensory, emotional and pragmatic experience), while visitors generally less appreciated the purely cognitive stimuli.

5. Limitations and conclusions

The study is subject to two main limitations, which suggest the next steps in developing this research stream. First of all, the World Expo represents a Mega-Event, and this kind of events depict several specificities influencing the level and the nature of the expectations of visitors (e.g., Lee & Lee, 2001). Hence, the study and the measure should be replicated in different contexts in order to test their adaptability to different tourism offer. A second limit lies in the testing of the segmentation model just on Chinese tourists; despite this choice provides a significant insight considering how Chinese tourists are becoming one of the most important tourism population in the world, the experiential mix sought for could be affected by cultural parameters to be tested in further cross-national samples in order to validate the segmentation proposed.

Despite these limitations, we believe that the study provides a further evidence of the diminished effectiveness of demographics in approaching tourist segmentation and suggests once more that psychographics are better predictors of visitors' satisfaction. In particular, we propose an experiential approach that, thanks to its general conceptual scope seems ideally replicable in different contexts and catches the emerging experiential view of marketing (e.g., Pine & Gilmore 1998). Such a view provides a tool able not only to interpret visitors' satisfaction in a more comprehensive way, but also, through a learning process and a thorough analysis of the experience provided by the venue, a useful tool for tourism planning and marketing, at an event, venue and territorial level.

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