CUSTOMER SEGMENTATION APPROACHES AND HOTEL OCCUPANCY PERFORMANCE: A CASE STUDY OF 4 AND 5 STAR HOTELS IN KLANG VALLEY

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ABSTRACT

Yield Management (YM) has been described as a method that can help an organization to sell the right inventory, to the right customer, at the right time for the right price. Application of YM strategies involves the hotel to practice market segmentation strategies in Malaysia has not been highlighted. Though in theory it may described strategies that can be practiced, this paper provide unforeseen glimpse of segmentation approaches practiced by hotel managers. This paper seeks to conceptualize the relationship of application of market segmentation strategy and occupancy performance by four (4) and five (5) star hotels in Klang Valley. Data collected from 37 hotels in Klang Valley area shows positive insights in research issues. Through the data collections and analyses the outcomes show the current market segmentation practices. A relationship between hotel that practise market segmentation strategies and revenue management performance is proven. It also showed the segmentation strategies hotel practise to attract most contributing market. For the conclusion, Hotel that practice effective market segmentation will have higher occupancy performance compared to other hotel.

Keywords: Malaysia, segmentation approaches, occupancy performance
INTRODUCTION

The service industry is one of the fastest growing industries in the world. Malaysia realized this industry is important to the national gross domestic profit (GDP). Public Bank Berhad (2008) reported that the service industry has contributed to 46% and with the growth rate of 9.9% annual. Tourism Malaysia (2009) reported Malaysia has recorded a total of 12,891,202 tourist arrivals from January to July 2008 compared to 12,404,377 tourist arrivals for the same period in 2007, representing an increase of 3.9%.

Malaysian Industrial Development Authority (MIDA) published that the non-government services sector is targeted to assume a major role in contributing to economic development. A major spotlight of the progress is the promotion of exports, including positioning Malaysia to become a regional hub for selected services. MIDA also forecasted that the service sector will record an annual growth rate of 7.5 per cent per annum and to contribute 59.7 per cent to GDP by 2020, (MIDA, 2008). Looking at the future growth of services industry it is critical to take opportunity in catering to the right market for the business in order to enjoy current and future growth.

Many organizations overspend on courting new customers and under-spend on retaining existing customers (Kotler, 2003). Having revenue in mind, determining the key strategy to satisfy the customer for the business is the main concern. Thus, customer selection for the business is one of the important factors that contribute towards organization revenue management. Although it is only a small fraction of revenue management, the effect of selecting customer for the business is remarkable. As the new millennium customer is widely varied, service providers need to understand the customer that they want to serve.

In focusing to customer selections, market segmentation strategy plays an important role in selecting businesses market segment. Berson, Smith and Thearling (2000), agreed market segmentation has consequently been regarded as critical elements in achieving successful modern marketing and customer relationship management. The mass market marketing is unable to differentiate and satisfy the need of diverse hotel customers (Tsai and Chui, 2004). As it may be useful for product marketing it is not suitable to be
Yield management (YM) or Revenue management is a concept of maximizing profit applied by airlines and later adopted by service industry such as hotel, restaurant, cruise lines, and theme park. Yield Management has been described as a method that can help an organization to sell the right inventory, to the right customer, at the right time for the right price (Kimes, 2002). Segmentation approach of the customer is vital to understand the characteristics of the customer and the ever changing needs and demand. Hotel sector relies for customer to be interested to the product and services they provided. With the changing of customer trends and demand, the practitioner needs to understand and anticipate the changes making it beneficial to the hotel operation, performance and importantly profitability.

The global hotel industry is viewed as a cyclical industry, an industry that is highly sensitive to the state of the economy (Bodie, Kene and Marcus, 2008) and the reason why hotel companies tend to have higher fixed costs (Kimes, 2002) and Malaysia is no exception. It deals with customer demands and matching customer need to ensure profitability and business sustainability. As the current customer need and preferences is rapidly changing, anticipating these changes is quite a challenge for the business operators. In coping with the ever changing demand of customers, it is vital for hotel operators clearly understand their customers. In long run understanding the customer help hotels to have a strong customer base which promises profitability and sustainability of the company.

Chung, On, Kim and Han (2002), emphasize that hotel guests might be important but segmentation by industry data has never been conducted until this time. Further posited, there are two major reasons, (1) lack of knowledge or recognition of its usefulness by hospitality researchers and (2) more realistic reason is the problem of collecting and standardizing the aggregated data of the market place. The extent in which market segmentation practices will influence performance as a factor that contributes towards the success of the company revenue management strategies. In supporting the above notion, it is important to investigate how managers in Malaysian hotel
industry are using the market segmentation approach to identify their potential market. Though the application and concept of yield management have been introduced to the hotel industry, in Malaysia there is an unseen loop of yield management applications. Therefore, this paper seeks to identify the current practice of segmentation strategy practiced by Hotel managers in 4 and 5 star hotels in Klang Valley.

Theoretical Framework

An adopted framework from Crystal (2007) is used to show the relationship between market segmentation and occupancy performance. Thus, enable research objective and questions to be examined and justified.

<table>
<thead>
<tr>
<th>Independent Variable (IV)</th>
<th>Dependent Variable (DV)</th>
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<tbody>
<tr>
<td><strong>Market Segmentation Strategy</strong></td>
<td></td>
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<tr>
<td>Shoemaker <em>et al.</em> (2007)</td>
<td></td>
</tr>
<tr>
<td>Geographic</td>
<td></td>
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<tr>
<td>Demographic</td>
<td></td>
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<tr>
<td>Psychographic</td>
<td></td>
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<tr>
<td>Usage</td>
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<tr>
<td>Price – Benefit</td>
<td></td>
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<tr>
<td><strong>H1 (+)</strong></td>
<td></td>
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<tr>
<td><strong>Occupancy Performance</strong></td>
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</table>

**H1:** There is a positive relationship between market segmentation and hotel occupancy performance.

LITERATURE REVIEW

Revenue management (RM) has been evolving as it has been firstly introduced by the airline industry in 1970’s and it had been recognized as the pioneer industry that introduces and explores the development and refinement of this concept. Larsen and Carter (1988); and James (1987), agreed that the techniques of RM have been increasingly used by the major airlines to maximize capacity utilization, overall revenue and consequently net returns. Furthermore Chiang, Chen and Xu (2007), added that more service industries, such as hotels, rental car agencies, and restaurants, began adopting the practices. Airline, hotel, and rental car industries represent traditional RM applications because they share similar characteristics (e.g., perishable service or product, fixed capacity, distinct customer segmentation,
and price differentiation). As hotel industry has the similar seasonal demand in which it fluctuates over a period of time, yield management is best adopted to provide best results. It is an integrated and systematic approach in maximizing revenue and manipulating the rates offered to the customers according the forecasted demand and supply patterns (Sanchez and Satir, 2005).

Segmentation strategy is important to an organization and can be effectively applied in the hotel industry as they have many segment of customer to be served (Kimes, 2002). The idea of differentiating the market through segmentation was brought out by Smith (1956), while Pride and Farrell (1983) supported that segmentations is a process of dividing customer into several group that have the same characteristics and product needs. Bonoma and Shapiro (1983) viewed market segmentation as the “core of good industrial marketing”. Vandermerwe, (2004) commented that market segments creations develops a better understanding of customers, which is a rather crucial requisite for effective marketing. He added that, the process requires commitment from the managers responsible for implementing the eventual segmentation. At its core, it is about reducing the number of entities being dealt with into a manageable number of groups that are mutually exclusive and share well defined characteristics (Yankelovich and Meer, 2006). Green and Stager (2005) concluded that there are 3 primary benefits of market segmentation in which they are easier marketing, finding niches and efficiency. This was supported by Anderson and Narus, (2003) and Dibb, Stern and Wensley, (2002) as segmentation enable an organization selectively to target “good” business. Blocker and Flint (2007), stressed that breaking down markets from one group to several subgroups based on common needs as one of the most powerful tools in marketing strategy.

Kotler (1997), Shoemaker, Lewis and Yesawich (2007), defined geographic segmentation as segmenting the customer by countries, city, media market, part of the city and even neighbourhood. A hotel in Singapore might draw most of their customer from America or Japan. Viswanathan (2005) added that business firms have long recognized that the knowledge of the geographic location and extent of a market is crucial in planning and evaluating marketing strategy. He posited that knowledge can be used include analyzing variations in sales penetration, determining sales territories, evaluating differences in promotional response, determining the
location of new facilities, pinpointing promotional efforts, forecasting sales and analyzing market potential. Thus according to Shoemaker et al. (2007), as the potential market is so diverse, a special care and consideration need to be taken in regards to the customer mix. In general, the segments reflect geographic groupings or groups of individuals and consist of potential consumers who are likely to exhibit similar responses to marketing efforts.

Basis of demographic segmentation techniques introduce by Assael and Roscoe (1976), Wells (1975) and Kotler (1997), include demographic variables such as age, gender, race, income, marital status, and education level. This segmentation is useful to provide data of the segment, however it may not distinguish the customer in term on buying power, as a plumber may have income more than a lawyer. Shoemaker et al. (2007), increase dual income earners, have a lot of disposable income, personal time, specific buying needs and patterns of behaviours. Chou et al (2000) used customer demographics to identify prospective customers and believe it provided an intuitive measure to guide in the selection of marketing targets.

Shoemaker et al. (2007) posited psychographic segmentation which focuses on consumer’s base on activities, interest and opinions, self concept and life behaviours. He defines psychographic are actually refers to the measurement of personality traits. Blackwell, Miniard, and Engel, (2001) concluded that it defines as the means by which people live and spend time and money, mirroring a person’s activities, interest, and opinions, as well as demographic variables.

Under the usage segmentation Shoemaker et al. (2007), point out that it is an umbrella that covers a large group of hospitality services. One criterion that is focused was purpose of customer visit to the hotel is the priority to be considered. Under this segment customer are divided under business and leisure simply either intention to use the hotel facilities and services.

Price - benefit segmentation are based on the benefit that people seek when buying a product and very closely related to satisfactions (Shoemaker et al., 2007). He adds that, price of product often includes benefit components which comprises of comfort, prestige, low price, recognition, attention and romance. He added price segmentation is a form of benefit segmentation, only it is more visible and tangible. In supporting this, several authors have
suggested that benefit segmentation is one of the best segmentation bases (Morrison, 1996, Loker and Perdue, 1992). Frochot & Morrison (2000) suggested benefit segmentation is most helpful in designing and modifying facilities and attractions, vacation packaging, activity programming, and service quality measurement. However, price element was always viewed as a sensitive issue to a customer; setting the right price supported with product benefit helps to reduce price sensitivity and fairness (Mason, 2005). As a consequence, in fulfilling their price expectations business customers buy products that satisfy their quality expectations and leisure travellers receive offerings that surpass their quality expectations (Lindstadt and Fauser, 2004).

Green and Stager (2005) pointed that the purposed for segmenting a market is to allow marketing programmes to focus on the subset of prospects that are most likely to purchase a product or service. If executed properly, it can ensure the highest return on marketing and sales expenditures. Kotler (2003) argued that the application of market segmentation is not guaranteed to improve profit; it has been believed to be one of the most important strategic management concepts for achieving long-term financial goals while minimizing business risk. Chen (2010), stated occupancy rate is a common performance measure of sales revenue in the hotel industry. This is due to the fact that, market segmentation strategy is the process of selecting the customer for the business. Hence, it is appropriate to use occupancy percentage as the indicator of performance.

METHODOLOGY

This paper adapted a quantitative approach using self administrated questionnaire with sample were among four and five star top level hotel managers because they are responsible in making decision on segmentation strategy and hotel revenue performance. According to Tourism Malaysia (2009), there are fifty five (55) five (5) and four (4) star hotels in Klang Valley area. Thus, the population of the study is 55 x 1 = 55 managers; hence, as the total population is small whole population was selected as sample for the study. With this benchmark plus the time constraints, 1 manager from each hotel were expected to be surveyed and this would come to a total of 55 respondents thus would give reliable and meaningful results. Reliability test were done first before the actual questionnaire were distributed to the
actual sample. Upon agreement, questionnaires were distributed throughout the selected sample which is 4 and 5 star hotel to be reviewed first by the organization to avoid misunderstanding. Descriptive analysis was conducted to identify segmentation approaches practiced by the hotel managers and correlations analysis done to prove the relationships between Segmentation strategies (Independent Variable) and Occupancy performance (Dependent Variable).

RESULTS

Response Rate

A total of 55 questions were distributed to four and five star hotels in Klang Valley. Out of 55 total hotels selected for the research, only 37 hotels returned the questionnaire with feedback.

Measuring the segmentation strategy applied by hotels in Klang Valley

The initial objective of the research was to identify the segmentation strategy applied by hotels. In order to rank the strategy used, mean score of each item is calculated to identify them. The result was reported in the following table (Table 1.1).

<table>
<thead>
<tr>
<th>Segmentation Strategies</th>
<th>Mean</th>
<th>Standard Deviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographic</td>
<td>2.99</td>
<td>.656</td>
</tr>
<tr>
<td>Demographic</td>
<td>3.27</td>
<td>.358</td>
</tr>
<tr>
<td>Psychographic</td>
<td>4.29</td>
<td>.423</td>
</tr>
<tr>
<td>Usage</td>
<td>4.22</td>
<td>.418</td>
</tr>
<tr>
<td>Price - benefit</td>
<td>4.00</td>
<td>.404</td>
</tr>
</tbody>
</table>

In responding to research objective one, this section analyzes the influence each dimension in market segmentation strategy, the mean score of 5 dimensions in market segmentation is rated which are geographic, demographic, psychographic, usage and price segmentations. In the
objective, the researcher sought to identify the current practice in market segmentation strategies in the current market. The most constant answers that were rated by the respondents were demographic segmentation ($SD = .358$).

Significantly the mean score analysis highlighted that psychographic (4.29), usage (4.22) and price (4.00) can be interpreted as most of the respondent agreed that these three types of segmentation are very important in the hotel industry. Referring to the developed scale for the instruments, these 3 segmentation strategies 75% importance and applied by the hotel industry.

In contrast, the other 2 dimensions namely demographic (3.27) and geographic (2.99), score were lower as compared to the other. In other words, the demographic and geographic segmentation is practiced in the hotel industry in a lesser degree compared to the other approach. This can be deduced as 50% of importance level of these practices in Malaysian hotel industry. This can be concluded to support that segmentation strategies must be applied, however the degree of applications between the variables was found significantly different.

**Measuring the relationship between market segmentation strategies and occupancy performance**

A standard Pearson correlation analysis was used to explore the relationship between the hotel occupancy performance (dependent variable) and segmentation strategies (independent variables). In this study, although there are many indicators of the dependent variable (performance) namely occupancy percentage (%), Average room rate (ARR) and Revenue per available room (RevPAR), the researcher has decided to use the occupancy performance (OCCP) as the dependent variable. Based on the data collection, the respondent are more open in disclosing information of the hotel occupancy performance rather than the monetary performance as it is considered private and confidential (P & C). Consequently, the use of occupancy percentage was appropriate as an indicator for performance.

Preliminary test was conducted before correlation was used. The scatter plot and normality plot of the data was assessed to determine data is normal before correlation analysis is done to ensure no violation of normality, linearity and homoscedasticity (Pallant, 2005). Pearson correlation
analysis was conducted and result is illustrated in Table 1.2.

Table 1.2: Correlations between Market Segmentations Strategies and Occupancy Performance

<table>
<thead>
<tr>
<th>Measures</th>
<th>Mkt Sgmt</th>
<th>Geo</th>
<th>Demo</th>
<th>Psycho</th>
<th>Usage</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlations</td>
<td>.329</td>
<td>-.159</td>
<td>-.125</td>
<td>.302</td>
<td>.229</td>
<td>.662**</td>
</tr>
<tr>
<td>Sig. (2 tailed)</td>
<td>.072</td>
<td>.347</td>
<td>.461</td>
<td>.070</td>
<td>.073</td>
<td>.000</td>
</tr>
</tbody>
</table>

N =37, **. Correlation is significant at the 0.05 level (2-tailed).

In the process of determining the direction and strength, correlation strength was established in reference to correlation table proposed by Cohen (1988) in Pallant (2005). The strength was illustrated in Table 1.3, table for correlation strength (r). As guidelines in determining correlation strength have been identified, the output data was analyzed.

Table 1.3 Cohen (1988) Table for Correlation Strength

<table>
<thead>
<tr>
<th>Pearson correlation (r)</th>
<th>Interpretations</th>
</tr>
</thead>
<tbody>
<tr>
<td>r = .10 to .29 or -.10 to -.29</td>
<td>Small</td>
</tr>
<tr>
<td>r = .30 to .49 or -.30 to -.49</td>
<td>Medium</td>
</tr>
<tr>
<td>r = .50 to 1 or -.50 to 1</td>
<td>Large</td>
</tr>
</tbody>
</table>

The main independent variable of market segmentation was significantly related to performance. A medium positive correlation was recorded, [r = .329, n = 37, p > 0.072]. The Pearson correlation analysis revealed the relationship between geographic segmentation and occupancy performance shows that there was small negative correlation [r = -.159, n = 5, p > 0.347]. Demographic segmentation also display a small negative correlation with occupancy performance, [r = -.125, n = 7, p > 0.461]. However the other three dimensions of segmentation strategies which are psychographic, usage and price is positively correlated with occupancy performance. The psychographic segmentation had medium positive correlation with occupancy performance, [r = .302, n = 5, p > 0.070]. Usage segmentation was also recorded medium positive correlation with occupancy performance, [r = .302, n = 6, p > 0.073]. The price - benefit segmentation was found to have a strong positive correlation with occupancy performance, [r = .662, n = 5, p < .000].
Thus, after Pearson correlation analysis has been conducted hypotheses for the study can be tested. In this study the researcher has set significance level ($\alpha$) at .10. According for Hair et al (2006), it is less conservative and easier to find significance is .10. Thus, it is acceptable to use this significance level for this study.

**H1: There is a positive relationship between market segmentation and hotel occupancy performance**

The overall analysis on the main hypothesis shows market segmentation and occupancy performance was positively related. According to the correlation strength, it is medium positive correlation. The significance level ($p$) .329 > $\alpha$ = 0.10, hence H1 is supported.

**DISCUSSIONS**

In this paper, dimension in market segmentation was examined individually in order to provide better understanding. Variable identify was geographic, demographic, psychographic, usage and price–benefit segmentation. Mean score analysis conducted in previous chapter revealed that the most practiced segmentation strategies was psychographic, usage and price – benefit. Subsequent to that were demographic and geographic segmentations. In context of the hotel industry, it was found out that the, managers are more concern in understanding how customer would react towards the product offerings in relation to the price charged and product benefit. This can also be viewed as meeting customer expectations and satisfaction is the main focus of hotel managers a part from making profit.

Conversely, the analysis also revealed that, demographic and geographic was less being practiced compared to the other strategy. As hotel in the study was located in the city centre and developed area namely Kuala Lumpur, Shah Alam, Petaling Jaya, Putrajaya and Cyberjaya, it is safe to generalize that customer in the population can be easily targeted with hotel product offering and choices. For example, different type of room and rates intended for different type of customer. Hence, this answers the first research question as to the current practice of segmentation strategy in Malaysia hotel which consist of four and five star hotel.
The overall finding of main hypothesis (H1) statically found that there is a significant relationship exists between market segmentation and performance. This signifies that hotel manager used segmentation strategies in ensuring hotel occupancy performance.

Implications

Yield management practices in Malaysia hotel industry in are still considered new. Though the concept and application was understandable by managers, there is still vague proof of its application. The subject matter of this study may be benefit to hotel managers, especially market segmentation strategy in the attempt to maximize revenue of the hotel. It is considered one of the first components in revenue management which target suitable customer for the business. Within the findings of this, it clearly showed that four and five star hotel practice segmentation strategy to segment to right market for the business. Hence, this paper has justified the claims that segmentation strategies applied in Malaysian hotel does influence hotel occupancy performance.

LIMITATION AND RECOMMENDATIONS

First limitation exists due to the sample size. In general, there were 55 hotels which consist of four and five star hotel in Klang Valley. However in this study only 37 hotels responded to lend a hand in the research.

Second limitation identified was the information requested in performance variable. Although RevPAR, ARR was requested, hotels may only provide ranges. In determining the actual performance, this answer may only gives surface explanation and comparison. It may be more beneficial to hotel operation be transparent in sharing the information for the purpose of research. In the same context, study in similar area in hospitality industry was found very limited.

Third limitation exists in the reporting process of this research. It is self reported study, descriptive analysis were done to give significant result. However, in providing more meaningful research outcome a combination of quantitative and qualitative approach can be done in the future. Triangulation approach gives both statistical data and supporting
statement from managers that practiced the segmentation strategies. Thus, more realistic data interpretation can be done.

Lastly, the final limitation exists in the study associated with the study focus. This study only focuses on market segmentation as a part of strategy in revenue management. The outcomes of the study cover the relationship and influence between market segmentation dimension and performance for 4 and 5 star city hotels. Therefore, it would be recommended that a study which covers segmentation strategy of city hotel and resort hotel may be conducted. Perhaps, comparison study may be done in the future towards the approach practised by these hotels as they have different set of customers.

**CONCLUSIONS**

The study provides an insight of segmentation strategy that was viewed before as theoretical approach. In general, this paper shows the relationship of segmentation strategies and occupancy performance. Market segmentation was the first step in revenue management strategy as it enables organization to identify the potential customers for their business. In doing so, the operation can focus on their target customer by supplying the market with suitable product bundling and pricing. Other than that, this study also provides the current practice of market segmentation strategies in Malaysia, namely focuses on 4 and 5 star city hotels. The result indicates that segmentation strategy is a hybrid strategy in which the combination of dimension is needed in maximizing the effect. Subsequently, it highlighted each dimension influence towards hotel performance.
REFERENCES


