POSITIONING OF SHOPPING CENTRES WITHIN THE RETAIL MARKET OF SINGAPORE

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ABSTRACT

There has been substantial research on factors affecting the performance of shopping malls and how retail images affect shoppers' perceptions of shopping centres. However, little research has been done to investigate how these attributes will affect the dimensions of brand positioning of shopping centres. By using a Multidimensional Scaling Model to create perceptual maps, pictorial positions of ten shopping centres are presented spatially in a map, according to shoppers' perceptions.

The results indicate that a two-dimensional perceptual map is appropriate for this study. Factor analysis is adopted to find the two significant major factors that best described the two dimensions, namely "shopping centre attributes" and "product attributes". After determining the dimensions, a two-dimensional map is created using the Multidimensional Scaling Model. The perceptual map shows the relative positioning of the ten shopping centres and four competitive sets of clusters are identified. Shopping centre managers could use these maps to apply different marketing strategies and plans according to the different segments in order to gain competitive advantage and to identify new opportunities and competition.

Keywords: Brand positioning, shopping centre, multidimensional scaling, perceptions, perceptual maps

INTRODUCTION

The Singapore retail industry has seen tremendous changes since the early 1960s (Sim, 1984). In the past, retailing was mainly carried out in shophouses. Gradually in the 1970s and 1980s, they were replaced by modern shopping centres concentrating in Orchard Road. However, in order to reduce overcrowding and traffic congestion in the Central Area in the 1990s, the Revised Concept Plan 1991 by the Urban Redevelopment Authority (URA) proposed the concept of decentralization into regional and suburban centres (Sim and Goh, 1998). The trend for suburban shopping centres has proliferated due to an increase in accessibility by the Mass Rapid Transit (conventional electrically-driven railway system) and arterial road network system.

Changing lifestyles, consumer demands, impact of technology and the influence of economic conditions have changed the pattern of retailing in Singapore. Shoppers expect a higher standard of goods and services due to their growing affluence and increase in educational and income levels. Shopping is no longer a means to an end but the end itself. It is looked upon by Singaporeans as a recreational activity, a leisurely and fun outing for people.

The challenge for both central and suburban shopping centres at present is to have a competitive edge to gain market share. Therefore, shopping centre owners and managers have to differentiate their shopping malls by branding and positioning themselves to a niche market in order to meet the new demands of shoppers.

Many studies and research have been conducted on how to improve the overall attractiveness of downtown and suburban shopping centres in terms of enhancing the image and retail space attributes (Ibrahim, 2002). However, little research has been done on how shopping centre owners and managers position themselves in the competitive retail market.

By using Multidimensional Scaling as a means of analysis, this research aims to explore the positioning of ten different shopping centres within the retail market of Singapore. It aims to capture a pictorial view of how each shopping centre is positioned in the minds of shoppers and in relation to other shopping malls.

LITERATURE REVIEW

Shopping Centre

A substantial amount of research on shopping centre development has been conducted over the years to highlight its importance in the real estate industry. Beddington (1982) define shopping as a source of activity for almost every individual in a civilized society for a selection of goods and services. It should be carried out in an exciting ambience with the right products and services to initiate interest in customers.

Many marketing experts have commented on the ambiguity of the term “shopping centre”. McGoldrick and Thompson (1992) state that the term “shopping centre” can mean either a comprehensive shopping development, as it does in most other countries, or a clustering of traditional shops in a town centre. Dawson and Lord (1985) define a shopping centre as a group of establishments, which is “designed, planned, developed, owned, marketed and managed as a unit”. For the purpose of this study, the definition proposed by Dawson and Lord (1985) is adopted because the subject matter in this research refers to shopping centres, which are designed, planned, developed, owned, marketed and managed as a unit.

Branding and Positioning

A brand is not just a name on a product. Rather, through constant investment and know-how, it can become and remain the reference of quality at an acceptable price, and imply the promise of tangible and intangible benefits. The value of brand comes from its ability to gain an exclusive, positive and prominent meaning in the minds of a large number of consumers (Cowley, 1991).

When it comes to brands, perception is everything. It has everything to do with what the consumers believe to be true about the brand. That is why a "genuine" brand can be recognized as the internalized sum of all impressions received by consumers resulting in a distinctive position in their mind based on perceived emotional and functional benefits (Knapp, 2000). The more distinctive a brand becomes in the consumer's mind, the closer it approaches the definition of a "genuine" brand. The less distinctive a brand is in the consumer's mind, the more room for competitors to occupy a position in the mind's eye, and the less "genuine" a brand becomes. Given that any brand is a mix of image and substance, the best starting point is often an exercise in understanding brand positioning related to substance; what the product is and does in isolation and also in relation to its competitors. Therefore, positioning is vital to brand building.

A product's position is the way the product is defined by consumers on important attributes and the place the product occupies in consumers' mind relative to other competing products (Kotler, 1999). Sengupta (1990) states that the position of a product is the distinctive place that it occupies in the consumers' mind relative to other competing products.

As the retail market is made up of many shopping centres, shopping centre managers have to adopt strategic positioning to differentiate their shopping centres from competing shopping malls. Positioning is a strategic initiative that convinces people to think about why certain shopping centres are better or distinct from the competitors. The positioning of shopping centres involves determining how shoppers perceive a shopping centre and developing and implementing marketing strategies to achieve the desired position in the market (Bollen, 1988). Positioning consists of 2 main stages:

1. the actions taken by the shopping centre managers to position their shopping centres with the shoppers; and
2. the shoppers' perceptions of how the centre is positioned.

In effect, this 'perceptual' positioning, over which a shopping centre manager has only limited control, is a direct result of the actions in support of the positioning strategy over which the shopping centre manager has complete control.

A positioning strategy, if properly implemented, can lead to increases in market share and profitability. However, the shopping centre owners and managers may need to constantly evaluate, maintain and enhance the market position of their shopping centres in the competitive retail industry. A shopping centre's brand position can be viewed from two perspectives, that of the brand's management and that of the customers. The retail management must have a firm concept of the centre's intended position and its promotional efforts must articulate not only what the brand offers, but also how its offerings are distinct from those of other brands.

Customers' perceptions of a retail centre brand's position can be subdivided into specific attributes that can, in turn, be depicted graphically on coordinate axes known as perceptual maps (Temporal, 2000). This allows a comparison of the brand's position in relation to the competitors. There are various analysis techniques that can be used to create perceptual maps: factor analysis, cluster analysis, discriminant analysis, correspondence analysis and multidimensional scaling, which differ in the assumptions, the perspectives they take and the input data used (Barnard and Ehrenberg, 1990; Dick et al., 1997). Perceptual maps using Multidimensional Scaling Model can indicate how 'close' one shopping centre is to competing shopping malls. Shopping centres that are positioned relatively far away from each other on the map are interpreted as less directly competitive, while shopping centres that have nearby coordinates are considered to be strongly competitive with each other (Arslan et al., 2000). The map can also identify open space, which is interpreted to be an available market niche either for repositioning of existing operations or for a new entrant. The aim of this study is to create perceptual maps using Multidimensional Scaling as a technique to analyse the shopping environment of Singapore.

RESEARCH METHODOLOGY

The research strategy adopted in this study is a mixed method, which comprises both qualitative and quantitative research. This is a form of methodological triangulation (Tashakkori and Teddlie, 1998). A qualitative study was carried out and then followed by a quantitative phase. The qualitative study mainly aimed to explore the areas and issues affecting shoppers' perceptions and to identify the attributes affecting shoppers' choice in patronizing a particular shopping centre. The qualitative phase of the study was done via in-depth interviews, where we interviewed thirty shoppers. This is appropriate as Walker (1985) states that qualitative research would require about twenty to forty respondents.

The research findings from the qualitative study were used as a framework in the quantitative research. The integration of both the qualitative and quantitative methods would complement each other's advantages and minimize inadequacies of each method, which would result in more valid and reliable overall findings.

On the other hand, quantitative research aimed to quantify the data collected, by way of a structured questionnaire survey. In this study, we have interviewed 250 respondents for the quantitative phase of the research. We selected ten shopping centres for the quantitative phase of the study. The ten shopping centres chosen in this study comprised shopping malls from the city centre, fringe centre and suburban areas. The three different areas were selected so that the study can measure the relative position of each shopping mall in shoppers' perceptions. The ten shopping centres were:

- Ngee Ann City
- Centre Point
- Far East Plaza
- Wisma Atria
- Heeren
- Suntec City
- Marina Square
- Jurong Point
- Causeway Point
- Tampines Mall

Shopping centres in the city centre consist of Ngee Ann City, Centre Point, Far East Plaza, Wisma Atria and Heeren; they are mostly concentrated along the Orchard Road Belt, stretching from the junction of Tanglin/Grange Road to the Dhoby Ghaut MRT station. They are accessible from all over Singapore by MRT, buses, taxi and private transport and the tenant mix is mainly characterized by international retail chains, boutiques carrying designer labels and the latest fashion, as well as departmental stores carrying a wide range of convenience shopping and specialty goods and services. Shopping centres in the city centre are at the highest hierarchy of the retail structure in Singapore.

Suntec City and Marina Square belong to shopping malls in the fringe centre, situated just at the outskirts of the Orchard shopping belt. They are within walking distance to City Hall MRT station, accessible by trains, buses, taxi and other private transport. The tenant mix offered is similar to those in the city centre, offering a wide variety of designer brands, specialty, convenience goods and services.

The next category belongs to the suburban shopping centres, comprises Tampines Mall, Causeway Point and Jurong Point. They have a lower hierarchy of retail goods and services compared to those in the city centre and fringe centre, offering more convenience goods and one-stop shopping needs. Due to the fact that they are located close to regional centres and residential estates, they are easily accessible by residents staying in these housing estates.

Using a semantic differential scale, respondents were asked to rate the ten shopping centres on the eleven attributes developed from the literature review, qualitative research and the pilot study. The 7-point scale ranges from '1' = Very Bad, '4' = Neutral, and '7' = Very Good. The eleven attributes developed from the literature review, qualitative research and pretesting were as follows:

- Convenient location / Easy accessibility
- Wide variety of merchandise
- Conducive shopping atmosphere (lighting, spacious and air-con)
- Presence of anchor tenant
- Availability of other amenities such as cinema, foodcourt, restaurants
- Size of shopping centre
- Good place for family and friends outings
- Adequacy of carpark lots
- Offer one-stop shopping
- Good customer services
- Reasonable price level
- Overall perception of the shopping centre.

The survey was done via face-to-face interviews with shoppers. Mall or mode interchange intercept interviews were used. Shoppers were intercepted at entrances or selected locations in a shopping mall and selected locations such as MRT and bus interchanges. These included Orchard, City Hall, Boon Lay, Woodlands, Tampines MRT Station and along the Orchard shopping belt, over a time span of six days. The surveys were conducted on weekdays and weekends in the months of November and December 2001, in the morning, afternoon and evening to ensure that respondents of various demographics were included in order to ensure a more representative sample. Although this method is tedious and time consuming, it can achieve a higher response rate compared to other interview methods, and also allows for on-the-spot clarification of any technical terms used in the questionnaire (McDaniel and Gates, 1996). Systematic sampling was used, as it is relatively easy to carry out. This means that one out of every five shoppers was selected randomly. If the shopper was unwilling to respond to the survey, the next shopper was approached.

Multidimensional Scaling

Multidimensional Scaling (MDS) is a set of techniques, which can be used to understand and measure human responses in terms of perceptions and preferences (Carroll and Green, 1997; Bijmolt and Wedel, 1999). There have been a number of studies conducted on the branding of products and services using MDS technique to infer peoples' perception and preferences of similar competitive products. Although there have been many studies on marketing, little research has been carried out in the real estate industry to identify the dimensions that describe consumers and shoppers' perceptions of shopping centres (Gambill, 2000).

MDS measures attitudes about objects in a multidimensional space on the basis of respondents' similarity judgements of objects or on the basis of different attributes perceived by the consumers (Zikmund, 1997). MDS is designed to analyze distance-like data called dissimilarity data i.e. data that indicate the degree of dissimilarity (or similarity) of various brands. It analyses the dissimilarity data in a way which displays the structure of the data as measured in mathematical space through a geometrical picture known as a perception "map".

There are many multidimensional scaling programs such as KYST, MDSCAL, PREMAP, INDSCAL, ALSCAL, MINISSA, MULTISCALE, POLYCON. We have used the ALSCAL (for perceptual mappings) in this study.

The earliest application of MDS in marketing research appears to have been conducted by a psychometrician. Stefflre (1972) used MDS to present consumers' perceptions of brand similarities in a spatial dimension. Stefflre's work emphasizes one of the main advantages of MDS, namely, the ease of presenting data and displaying interrelationships among products and brands, as filtered through sophisticated data analysis techniques designed to highlight critical features related to buyers' judged similarities of stimuli.

MDS has been employed by hotel managers in the USA to create perceptual maps showing the relative positions of the various hotel brands against each other as viewed by the business travel managers and agents. It aimed to examine any movements in a brand position over a three-year period so that the hotel management can better position themselves in the competitive hotel industries (Dev et al., 1995). Most of the MDS-related studies were those in relation to consumer products, such as soft drinks (Green et al., 1989), Vicks VapoRub (Sengupta, 1990), and internet service providers (Arslan et al., 2000).

In this study, MDS is applied to the retail industry in Singapore to determine the dimensions consumers use to differentiate various shopping centres and the relative positions of each shopping centre.

Factor Analysis

In this study, factor analysis is adopted for two purposes; namely, data reduction and identification of the underlying dimensions or factors associated with the individual respondent's perceptions. It is often used prior to further multivariate analysis such as discriminant analysis, cluster analysis and multidimensional scaling.

In adopting the factor analysis, it is imperative to determine the appropriateness of the data set by applying the Bartlett's test of sphericity and Kaiser-Meyer-Olkin (KMO). In this study, we have adopted the latent root criterion (eigenvalues greater than one) as the main method in extracting the number of factors for the analysis. This criterion is based on the premise that an individual factor should account for the variance of at least a single variable if it is to be retained for interpretation. After the extraction of factors, it is important to look at the factor loading. It is the means of interpreting the role each variable plays in defining each factor. Loadings indicate the degree of correspondence between the variable and the factor, with higher loadings making the variable a better representative of the main factor (Hair et al, 1998). The variables with higher loadings are likely to influence the labelling of the factors. In this research, the labels of the two factors were based on the loadings of the variables on the two factors, as well as references to past research.

DATA ANALYSIS

Reliability Analysis

Before analysing the data, the survey results were tested for their reliability. The reliability analysis was conducted to measure stability of the results over time or internal consistency of items in an attitude scale. In this analysis, the reliability of the questions was tested by calculating the Cronbach Alpha coefficient (Cronbach, 1951). If the Cronbach Alpha coefficient calculated has a value of 0.7 and above, it could be said that the scale is reliable for the researcher to draw conclusions and make decisions. In this study, the Cronbach Alpha coefficient yields a value of 0.9576, indicating that the data collected from the respondents is sufficiently reliable for data analysis.

Means of Attributes Ratings

Table 1 shows the mean ratings of the eleven attributes of the ten shopping centres by using a semantic differential scale of '1' = Very Bad to '7' = Very Good. It shows that Ngee Ann City, Suntec City and Marina Square are rated higher by most of the respondents, whereas Far East Plaza is rated lowest in most of the attributes stated in the questionnaire. Wisma Atria, Centre Point and Heeren have similar mean score ratings as perceived by shoppers. The suburban shopping centres, i.e. Jurong Point, Causeway Point and Tampines Mall recorded slightly lower mean scores than the preceding groups, but they are considered to have the most reasonable price level as compared to other shopping centres in the city centre and fringe centre.

Positioning of Shopping Centres

Figure 1 shows the positions of the ten shopping centres on a two-dimensional map. After the identification of the positions of the ten shopping centres, it is important to identify and name the two dimensions in order to understand the sources of differences among the ten shopping centres. Factor analysis was conducted on the attribute ratings of the shopping centres to label the two dimensions.

Table 2 summarizes the results of the factor analysis procedures. It shows the values of the Bartlett's test of sphericity (.000) and Keser-Meyer-Olkin (KMO) (.935) which indicate that the data set is appropriate for factor analysis. The latent root criterion (only factors having eigenvalue greater than 1 are considered significant and those less than 1 are disregarded) suggested a two-factor solution, which accounts for 60.608% of the total variance (Hair et al., 1998). In order to simplify the factor extracted, the respondents' ratings were rotated using the varimax orthogonal procedure.

Figure 1: The Two-Dimensional Perceptual Map of the Ten Shopping Centres using Multidimensional Scaling

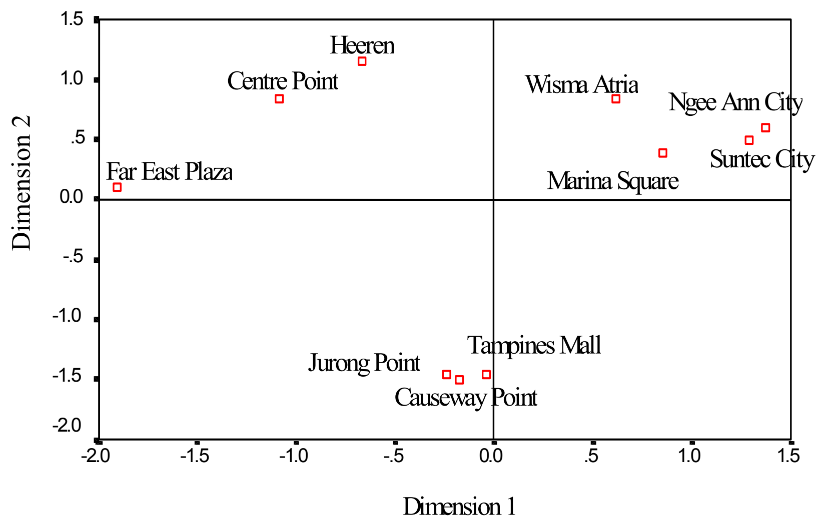


Table 1: Mean Score Ratings of Shopping Centres

Attributes	Shopping Centres									
	Ngee Ann City	**Centre Point**	**Far East Plaza**	**Wisma Atria**	**Heeren**	**Suntec City**	**Marina Square**	**Jurong Point**	**Causeway Point**	**Tampines Mall**
Convenient location / Easy accessibility	6.21	5.42	4.68	6.20	5.13	5.05	4.67	5.35	5.36	5.40
Wide variety of merchandise	6.06	4.86	4.50	5.03	4.62	5.94	5.09	4.73	4.74	4.92
Conducive shopping atmosphere	6.12	5.05	3.90	5.31	5.26	5.91	5.06	4.84	4.86	4.97
Presence of anchor tenant	5.88	5.01	3.46	4.78	4.66	5.63	4.80	4.42	4.59	4.74
Availability of other amenities	5.26	4.24	3.48	4.17	4.15	6.00	5.48	5.24	5.15	5.26
Size of shopping centre	6.34	4.77	3.92	4.76	4.48	6.38	5.37	4.93	4.99	4.96
Good place for family and friends outings	5.80	4.66	3.68	4.77	4.47	6.08	5.31	4.85	4.98	4.98
Adequacy of carpark lots	5.34	4.17	3.71	4.20	4.12	5.52	5.04	4.47	4.59	4.53
Offer one-stop shopping	5.81	4.66	3.59	4.52	4.06	6.04	5.18	5.04	4.92	5.05
Good customer services	5.08	4.63	3.83	4.57	4.49	5.02	4.66	4.34	4.42	4.43
Reasonable price level	3.97	4.31	4.70	4.14	4.19	4.62	4.67	4.83	4.84	4.78
Overall perception of shopping centre	**5.89**	**4.76**	**4.02**	**4.97**	**4.91**	**5.95**	**5.05**	**4.72**	**4.68**	**4.79**

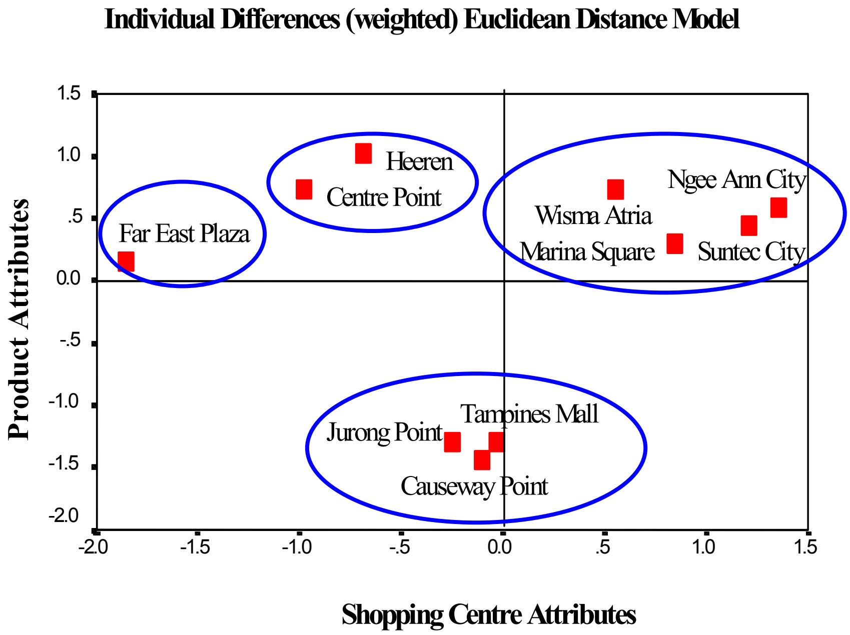
Table 2: Results of Factor Analysis

Attributes	Shopping Centre Attributes	Product Attributes
	Factor 1	Factor 2
Variance Explained	50.912 %	9.696 %
Eigenvalues	5.600	1.067
Factor Loadings		
Size of Shopping Centre	0.832	
Good Place for Family and Friends Outings	0.812	
Conducive Shopping Atmosphere	0.809	
Offers One-stop Shopping	0.808	
Presence of Anchor Tenant	0.804	
Availability of Other Amenities	0.764	
Adequacy of Carpark Lots	0.691	
Wide Variety of Merchandise	0.657	0.337
Good Customer Services	0.534	0.442
Reasonable Price Level		0.834
Easy Accessibility		0.592
Bartlett's Test of Sphericity		.000
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.935
Total Variance		60.608

The two main factors derived are named as "shopping centre attributes" and "product attributes". These representations are consistent with past research (for example, McGoldrick and Thompson, 1992; Ibrahim, 2002). "Shopping centre attributes" accounts for 50.912% of the total variance. It includes attributes, such as size of shopping centre, conducive-shopping atmosphere, presence of anchor tenant, availability of other amenities, offers one-stop shopping etc. On the other hand, "Product attributes" accounts for a much lower variance of 9.696%. It refers to wide variety of choice of merchandise, availability of latest fashion and major large clothing stores, high quality merchandise store, price level and good service quality stores.

Figure 2 shows the final two-dimensional map of the ten shopping centres' positions in the shoppers' minds. It shows that Ngee Ann City and Suntec City are positioned in the same area, and therefore are perceived by most shoppers as being similar to each other. These two shopping centres are perceived by shoppers to have very good shopping centre attributes and relatively good product attributes. The next group of shopping centres which are positioned very close to the above mentioned group are Marina Square and Wisma Atria. Marina Square is perceived more favourably along shopping centre attributes than Wisma Atria, but Wisma Atria is perceived more favourably along the product attributes.

Figure 2 : The Two-dimensional Perceptual Map of the 10 Shopping Centres



Heeren and Centre Point are perceived to be similar to each other as they are positioned relatively close to each other. However, Heeren differs from Centre Point, as it is slightly stronger in both dimensions. Far East Plaza, a shopping centre that mainly caters to youngsters, is positioned far away from the rest and it is perceived to be very weak in shopping centre attributes and satisfactory in product attributes, as it is positioned very close to the x-axis.

Suburban Malls such as Jurong Point, Causeway Point and Tampines Mall are clustered very near to each other, but far away from other shopping centres in the town centre. They are perceived to be weak in product attributes and neither weak nor strong in shopping centre attributes.

Therefore, Figure 2 shows four main groups of shopping centres that are positioned close to each other. They are perceived to be similar when analysed according to the two dimensions, shopping centre and product attributes.

Group 1: Suntec City, Ngee Ann City, Marina Square, Wisma Atria
Group 2: Heeren, Centre Point
Group 3: Far East Plaza
Group 4: Jurong Point, Causeway Point, Tampines Mall

Reasons for the positioning of the shopping centres can be implied by linking the results in Figure 2 to the mean score ratings of the ten shopping centres as illustrated in Table 1. Shopping centres belonging to Group 1 have positive values in both the dimensions of shopping centre and product attributes i.e. they are perceived to be good in both of these factors. However, Ngee Ann City and Suntec City are slightly better perceived in shopping centre attributes than Marina Square and Wisma Atria. This may be due to the former group having attributes such as bigger size of the shopping centre; presence of anchor tenants, such as Takashimaya and Carrefour hypermarket; conducive shopping atmosphere such as good design, lightings and spaciousness; availability of other amenities such as cinema and restaurants; adequate number of carpark lots due to its large size, and therefore a good place for family and friends outings.

However, Wisma Atria is slightly better positioned in product attributes than the rest of the three. The reasons may be attributable to Wisma Atria's ability to offer better service quality stores, availability of latest fashion stores and close proximity to Orchard MRT station than the rest.

From this competitive set, it can be seen that shopping centres in the city centre (Ngee Ann City and Wisma Atria) and in the fringe centre (Suntec City and Marina Square) are both well-liked by shoppers, as long as they are able to offer wider variety of merchandise, convenient locations, conducive shopping atmosphere.

The second group (Group 2) consisting of Heeren and Centre Point is perceived to be good in product attributes, but are less favourably perceived in terms of shopping centre attributes. This is because both Heeren and Centre Point offer a major anchor tenant, i.e. HMV and Robinson shopping centre respectively, which possess a strong attraction to shoppers. However, both of these shopping centres may be slightly lacking in other amenities such as cinema and restaurants, smaller size of the shopping complex and inadequacy of carpark lots.

As for shopping centres in Group 3, i.e. Far East Plaza is perceived to be very weak in shopping centre attributes, but satisfactory in product attributes. This is because Far East Plaza does not have a conducive shopping environment such as good lighting and design, absence of major anchor tenant and other amenities like cinemas. However, it is still well-liked by youngsters as it offers the latest fashion and clothing stores and relatively reasonable price level. Far East Plaza should try to improve the shopping centre attributes in order to gain a more distinctive market position.

The five shopping centres in Group 4 consisting of the suburban shopping malls, are positioned very close to each other and away from those in the city centre. They are perceived to be weak in product-related features, perhaps due to unavailability of major branded clothing stores and latest fashion; less variety of merchandise due to the smaller size of shopping complex and poorer service quality. However, these suburban malls are positioned close to the suburban housing estates and offers convenient location to shoppers in these residential areas.

From the groupings of shopping centres, it is apparent that most shopping malls in the city centre and fringe centre are perceived positively in the product attributes, whereas shopping centres in the suburban areas are mostly perceived to be poorly in this respect. On the other hand, relating to the shopping centre attributes, there is a wide variation in shoppers' perceptions of shopping malls in the city centre and fringe centre. Ngee Ann City, Suntec City, Wisma Atria and Marina Square are well perceived in shopping centre attributes, but Heeren, Centre Point and Far East Square are poorly perceived in this dimension. In addition, suburban shopping malls are better perceived than some of the shopping centres in the city centres.

CONCLUSION AND IMPLICATIONS

This study seeks to explore the brand positioning of ten shopping centres in Singapore, by using a Multidimensional Scaling Model to capture the pictorial view of how each shopping centre is perceived by shoppers in relation to other shopping centres.

Suntec City, Ngee Ann City, Marina Square and Wisma Atria are perceived to have positive values in both the dimensions of shopping centre and product factors. Since these shopping centres are perceived to be quite similar, the shopping centre managers of each of these retail centres should try to explore developing a competitive advantage in order to occupy distinctive positions in the market.

On the other hand, Heeren and Centre Point are perceived to be good in product-related, but are less favourably perceived in terms of shopping centre attributes. Therefore, effort must be made by improving the shopping centre attributes to gain market shares. This could be in the form of enhancing the shopping environment, creating a niche for group shopping activities, such as family shopping destination, as well as bringing in more anchor tenants.

Far East Plaza is perceived to be very weak in shopping centre attributes, but slightly satisfactory in product factors. Thus, it should try to reposition itself to a stronger place in both of the dimensions. This would require a thorough repositioning exercise, not only to enhance both the shopping centre and product attributes, but also to capitalize its strength in attracting youngsters to the shopping centre.

Jurong Point, Causeway Point and Tampines Mall are perceived to be weak in product attributes and neither weak nor strong in shopping centre attributes. Thus, both the shopping centre and product attributes should be improved to sustain their market shares. Being closely located to the suburban housing estates provides a natural niche to these shopping centres. Therefore, these shopping centres should not only provide the daily needs of the residents, but also selected quality goods and tenants that would enable them to have competitive advantage with the shopping centres in the city and fringe centres.

In conclusion, this study has provided an insight into the relative positioning of the ten shopping centres by exploring the perceptions of shoppers of each individual shopping mall. Shopping centre managers need to examine the attributes that customers use to differentiate one shopping centre from another, checking the dimensions on which that position is based both for their own retail centre and for their competitors.

By developing perceptual maps using MDS, shopping centre managers can determine which shopping centres are actually in the competitive set and allow overall comparisons of the positions of various shopping centre brands. Besides, by maintaining the perceptual maps over time, managers can assess changes in the centre's marketing strategies that caused the position to change and also identify potential threats and opportunities. By spotting the ideal point in the map that are not occupied by any existing shopping centres, a manager can position his shopping centre to tap new opportunities in order to create an exclusive niche market. As the retail scene is constantly changing, it is imperative that shopping centre managers conduct regular positioning analysis to ensure their survival and keeping abreast with the ever-changing shoppers' expectation.

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