Growing Shopping Malls and Behavior of Urban Shoppers

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Abstract

Shopping malls contribute to business more significantly than traditional markets which were viewed as simple convergence of supply and demand. Shopping malls attract buyers and sellers, and induce customers providing enough time to make choices as well as a recreational means of shopping. However, competition between malls, congestion of markets and traditional shopping centers has led mall developers and management to consider alternative methods to build excitement with customers. This study examines the impact of growing congestion of shopping mall in urban areas on shopping conveniences and shopping behavior. Based on the survey of urban shoppers, the study analyzes the cognitive attributes of the shoppers towards attractiveness of shopping malls and intensity of shopping. The results of the study reveal that ambiance of shopping malls, assortment of stores, sales promotions and comparative economic gains in the mall attract higher customer traffic to the malls.

Keywords: Shopping malls, traditional markets, sales promotion, market ambiance, leisure shopping, recreational services, retailing, market congestion, customer value, consumer behavior

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Introduction

Marketplaces in urban demographic settings attract large number of buyers and sellers which can be termed as market thickness. Co-existence of many shopping malls along with traditional markets in a marketplace causes market congestion. This problem may be resolved by developing small kiosks for transactions and allowing consumers to indent customized products and services from the base stores (Roth, 2008). The growth of market share for specialized retailers and large departmental stores depends on the size of consumer segment in a given urban population. It is observed that consumers' buying preferences become more diversified as the extent of retail stores increase within a confined area. Thus, the market size reaches a threshold and the consumers' preferences of shopping are jeopardized due to indecisiveness in shopping. However, shopping centers and hypermarkets became important elements in the urban landscape, though lack of planning and vision led to chaotic development and congestion of marketplaces affecting the growth retailers (Kok, 2007). A larger shopping center can facilitate a greater variety of shops and create a more pleasant environment for the shoppers, thus enticing shoppers to visit and stay longer. This proposition leads to one of the challenges faced by the managers of shopping malls located outside the traditional shopping belt. which is how to attract shoppers to patronize their malls (Ooi and Sim, 2007).

Narrowing the shopping streets and the rise of shopping malls have been major trends in retailing in emerging markets. There has been no proper planning to manage the shift of agglomeration of retail stores from both marketing perspective and consumers' point of

view. However, findings of some studies proved to be quite similar for both shopping streets and shopping malls; the retail tenant mix and atmosphere had the highest relative importance (Teller, 2008). The social demand for environment friendly shopping malls is increasing as a result of rapid urbanization. To ensure the efficiency of public spending, their provision should be based on socio-economic criteria of the region. Hence, suburbanization has been continuing in developing countries such as Mexico along with the deepening of market expansion. The process of suburbanization has gone beyond purely government-initiated relocation of households and polluting industries in emerging markets like India, China, Brazil and Mexico. In order to reduce the shopping area congestion the new round of suburbanization has been driven by the development of large suburban shopping malls and retail parks (Feng et al, 2008). It is observed that large and recreational shopping malls attract the regular shoppers and tourists towards frequent shopping. Accordingly, most of the growing cities are patronizing their suburban shopping malls and power centers, rather than downtown market places (Maronick, 2007). Major attributes of shopping mall attractiveness include comfort, entertainment, diversity, mall essence, convenience, and luxury from the perspective of shoppers. Such shopping mall attractiveness may be designed in reference to the three broad segments of shoppers that include stress-free shoppers, demanding shoppers, and pragmatic shoppers. This enables mall managers to develop appropriate retailing strategies to satisfy each segment (El-Adly, 2007).

This study discusses the impact of growing congestion of shopping mall in urban areas of Mexico on shopping conveniences and shopping behavior. Based on the survey of urban

shoppers conducted, the study analyzes the cognitive attributes of the shoppers towards attractiveness of shopping malls and intensity of shopping. Personality traits of shoppers affecting the preferences for shopping malls in reference to store assortment, convenience, distance to malls, economic advantage and leisure facilities have also been discussed in the study. Discussions in the paper also examines the specific evidence of the effects of ambience stimuli such as aroma, music and video screen media as major indicators of shopping mall attractiveness.

Literature Review and Framework of Hypotheses

Location and Shopping Behavior

The development of the shopping mall and leisure facility centers in Mexico need to be evaluated from the perspectives of economic, operational and managerial efficiency. The economic relationship concerns the degree of dependency between the attractiveness of shopping malls and shoppers' personality traits in reference to the market share, returns on investment and profitability (Rajagopal, 2008). Two types of shopping centre models are observed in the emerging real estate markets in developing countries which are characterized by their ultimate relationship with the physical shopping centre on whose web site they reside (Dixon and Marston, 2005; Kuruvilla and Ganguli, 2008). The underlying success factors of planned, centrally managed and large shopping malls in the retailing sector is grid around customer satisfaction in reference to selection, atmosphere, convenience, sales people, refreshments, location, promotional activities and merchandising policy (Anselmsson, 2006). It is observed that agglomerations of small stores selling similar ranges of goods around the shopping malls also cause congestion

and often divert attraction of price sensitive shoppers towards unfamiliar brands. Although such agglomerations of retailing activity are not unique to Mexico as there are market places accommodating large number of small retail outlets, the development is arguably unusual in the ways that the number of agglomerations continues to grow and these new agglomerations are dealing in a wide range of goods including electronic gadgets (*e.g.* Blois *et al*, 2001). Thus, hypothesis is framed as:

H1 (a): Congestion of shopping malls with same store brands reduces the shopping attractions and visit of shoppers to the malls

It is found that assortment of stores, mall environment and shopping involvement factors have a differential influence on excitement and desire to stay in the malls, which in turn are found to influence patronage intentions and shopping desire in the malls (Wakefield and Baker, 1998). However, it is evident from some research studies that conventional retailers in and around the mall and new age tenants have different target group to serve, small traditional retailers possibly co-exist around large shopping malls. The contemporary retailers seem to have not evolved enough to replace conventional retailers around their marketplace (Ibrahim and Galvan, 2007). In fact, the presence of small retailers' traditional marketplace such as *Pericoapa*¹ in the study region in Mexico has driven an alternative option for mall managers to rejuvenate the shopping attractions as well as allow variety of shops in the mall. The retailing territories in Mexico are complex comprising the distinct habitation pattern, transit system, and state-licensed periodic

¹ Historically, this market was started as a casual market, which is now a shopping mall and major entertainment complex. However, stores in this market are somewhat informal and deal in variety of consumer and electronic merchandise.

street markets bridging gaps in public spaces. Such urban planning allows retailing integration and collective behavior of consumers in street markets, and shopping malls (e.g. Loafland, 1985). Small retail stores outside the large shopping malls display ethnic product which are of low price and high attraction. Shoppers visiting large malls choose to shop between ethnic shops and mainstream store brands located inside the malls. Such behavior of shoppers is observed when the strong presence of ethnic economies and mainstream businesses in large shopping malls compete against each other (Wang and Lo, 2007). Accordingly hypothesis may be derived as:

H1(b): Agglomeration of small retail stores around large shopping malls deviates consumer shopping focus from stores inside the mall as customers get ethnic ambience and economic gains in buying from small retailers

It is commonly assumed that the consumers' decision concerning the place they choose usually for shopping depends essentially on the distance to the mall. The satisfaction of shoppers plays at least an equally important role in metropolitan areas where commercial zones are numerous enough to lead consumers to choice decisions. Thus different behavioral aspects including perception of shopping possibilities, expected pricing practices and general global environment of each shopping mall affect the satisfaction or dissatisfaction of the consumers (Leo and Phillipe, 2002). Motivations of shopping include inside and outside ambience of mall, layout, and extent of involvement in the shopping process. Ambience of shopping mall, architecture, ergonomics, variety, and excitement motivate the shopper to stay long and make repeated visits to the mall (Craig and Martin, 2004). Common promotional activities employed by the stores in shopping

malls include sales and encouragement to encourage the shoppers to make frequent visits to the mall. Some traditional promotions such as fashion shows and product displays are shown to be poor performer strategies in generating shopper's response, while mall-wide sales are the preferred promotion. It is argued that a combination of general entertainment and price oriented promotions are found to be strong alternatives to encourage customers to frequent visits and more spending (Parsons, 2003). Hispanic shoppers including Mexican buyers make the trip to mall for shopping along with family and friends, and buy largely food and beverages during the visit. Hispanic shoppers also spend more time at the mall shopping at various stores during their stay. Accordingly, marketers have become increasingly interested in the extent to which situational factors influence consumers' purchase behavior (Nicholls, 1997). In view of the above studies, hypothesis may be developed as:

H1 (c): Urban shoppers visit shopping malls as leisure centers to relax and tend to shop in response to sales promotions employed by different stores

Ambience and Shopping Arousal

A common observation about shopping malls is their *similitude*. Despite such uniformity, shopping mall are increasingly using *place branding* as the basis for promotional activities, assortment of shops and customer services at all levels of mall. The effectiveness of malls is enhanced by measuring the shoppers' traffic and sales of the retail tenants (Parsons and Ballantine, 2004). Developing inside and outside ambience of shopping malls for enhancing the shopping experience has been a recent concept in retailing, and many pleasant ambient stimuli such as product videos, music and fragrance

help consumers to make positive buying decisions. Consumers make holistic evaluations of shopping malls in view of the arousing quality of ambiance stimuli for buying products and derive satisfaction on buying products and services. Consumers with strong shopping motives are found to experience more pleasure and arousal and find the mall ambience to impulse buying behavior (Mattila and Wirtz, 2004; McGoldrick and Pieros, 1998). The most common configuration for shopping centers is linear. Parking and public conveniences are provided in the mall. Commonly, ambiance around shopping malls is devoted to parking, unless a multi-level parking structure is provided for customer use (Carter and Vendell, 2005).

Motivational forces are commonly accepted to have a key influencing role in the explanation of shopping behavior. Personal shopping motives, values and perceived shopping alternatives are often considered independent inputs into a choice model, it is argued that shopping motives influence the perception of retail store attributes as well as the attitude towards retail stores (Morschett *et.al*, 2005). The recreational facilities prompt shopping arousal and play a pivotal role to deliver a divulging impact of buying behavior of young consumers. Shopping supported with recreational attractions may be identified as one of the major drivers in promoting tourism by demonstrating the quality fashion products and store preferences among tourist shoppers. Arousal in shopping makes young consumers stay longer in the stores, experience the pleasure of products and make buying decisions. Perceptions of shopping duration, emotional levels, and merchandise evaluations are derived from the level of arousal experienced by the

consumers in the shopping malls (Rajagopal, 2007). Hence, the following hypothesis is constructed:

H2 (a): Consumers are influenced in making buying decisions by the product attractiveness and arousal generated during shopping in the malls.

Arousal during the shopping may be seeded through multifaceted activity that may be performed in various ways and embody different consumer feelings. It is also argued that there is a need to focus more on the influence of retail ambience on shoppers engaged in leisure shopping (Backstrom, 2006). The three distinct dimensions of emotions, which include pleasantness, arousal and mall attractiveness, have been identified as major drivers for making buying decisions among shoppers (Rajagopal, 2006). The ambience of shopping malls whether pleasant or unpleasant moderates the arousal effect on satisfaction and in-store buying behaviors. Satisfaction in pleasant retail ambience where music, hands-on experience services, playing areas and recreation are integrated maximizes the consumer arousal. It has been observed that young consumers perceive positive effect on in-store behaviors if shopping arousal is high. Thus, retailers need to pay attention not only to the pleasantness of the store environment, but also to arousal level expectations of shoppers (Wirtz et al, 2007). The impact of inside mall ambience can be measured in reference to the degree of stimulation and pleasure gained by consumers. Interactive tools on product learning provided in the retail stores significantly affect the level of arousal and pleasure which contribute towards experience, and thereby influence the buying behavior. As higher stimulation or interactive learning provided by the retailers focuses on gaining initial experience on the product use, consumers tend to engage in higher arousing activities by acquiring the product (Menon and Kahn, 2002). However, malls at times fail to recognize that what influences buyers' satisfaction is not the same as what engenders store loyalty (of tenants), and consequently do not effectively develop the shopping ambience to stimulate buying decisions. Hence, they need to vigilantly manage the quality of arousal by developing adequate customer involvement in the buying process and retail shoppers (Miranda *et al*, 2005). Considering the evidences from the previous studies discussed above, the hypothesis is framed as:

H2 (b): Shopping malls with better leisure facilities and ambience attract large number of visitors who stay long in the malls and indulge in compulsive buying

Retail Competition and Shopping Mall Attractiveness

In retailing sector, new players constantly emerge to satisfy consumer demand better locating stores in attractive shopping malls. Retailing strategies are driven by competitive stimulus as consumer demands and desires shift with new offerings and existing firms disappear when they can not adapt the change. Retailers seek to dominate a distinct classification of merchandise and wipe out the competition. Retailers in shopping malls engage outsourced salespeople to promote their brand and prospect new shoppers. The bargaining power of firms increases with outsourced salespeople who stimulate the demand for products and contribute to the enhanced sales at retail outlets. It has been observed that pull effect for the brands supported by the sales promoters increases at the retail stores as customers gather the pre-buying information form sales promoters (Gomez *et al*, 2007). It is observed that retailers in shopping malls develop competition over business hours and price. Such strategies effect consumers' shopping attraction and

intensity of shopping as often change in business hours leads to store switching behavior. However such competition can not be stretched by the retailers beyond social optimum (Shy and Stenbacka, 2008). It has been further evidenced by another study that retailers compete for market share using both price and variety. Retailers display extensive product lines and new variety of products in their store and keep differential prices as retail competition suggests that product heterogeneity is critical to retail price to gain competitive advantage over others. However, retailers in large shopping malls tend to follow moderately cooperative strategy, thus competition between malls and smaller forms of shopping centers has led mall developers and management to consider alternative methods to build excitement with customers (Timothy and Stephen, 2006). Therefore, the hypothesis may be constructed as:

H3: Competitive sales promotions of retail stores in shopping malls induce variety seeking behavior and build store loyalty among shoppers.

Five essential qualities of aesthetic judgment, which include *interest, subjectivity, exclusivity, thoughtfulness, and internality,* need to be nurtured among consumers to develop conviction in buying. The quality of aesthetic judgment driven by in-store aura and arousal on new products, exercised by the customers in association with the sales promoters, determines the extent to which new products and brands promoted enhance quality of life (Dobson, 2007). Convergence of sales promotion, customer's perceptions, value for money and product features drive arousal among customers. The nature of customer-retailer relationship functions as the key in selling and buying process in reference to in-store promotions. However, in this process the perceptional problems with

customers can greatly devalue the customer-promoter relationship and brand as a whole (Platz and Temponi, 2007; Rajagopal, 2007). Consumer appreciation of premium-based promotional offers is more positive when the premium is offered through an easy process and in combination of relatively lower quantity of products to purchase. It has also been found that when value of the premium is mentioned and brand perception is positive, compulsive buying tendencies are higher among customer (d'Astous and Jacob, 2002). The in-store environment variables in the shopping malls driving impulsive buying behavior include display of point of sales posters, exhibiting promoting discounts and cheaper prices, while the atmosphere engagement referring to enjoyment, elegance, and attractiveness is conveyed by ambience inside the shopping mall. Such behavioral drivers may also be referred as in-store promotional effect and atmospheric effect (Zhou and Wong, 2004).

Study Design

Sampling

This study has been conducted in 14 shopping malls comprising 623 assorted stores located on the street Canal de Miramontes in south of Mexico City. This street has been purposively selected as it branches in various residential settlements. The selected street joins two municipalities (known in Spanish as Delegación)- Tlalpan and Coyoacan which account for 6.9 percent (population 607545) and 7.2 percent (population 628063) respectively of the total population of Mexico City (Distrito Federal) according to the 2005 census (INEGI, 2008; Demographia, 2008). Location of the malls covered under study is exhibited in Figure 1.

//Figure 1 about here//

The sample respondents who frequently visit malls for leisure shopping in southern residential areas in Mexico City were selected for this study. These respondents showed homogeneity in shopping behavior in reference to leisure shopping, impact of shopping mall ambience on shopping visits, store loyalty, point of sales promotions, buying decision process, point of sales arousal on store promotions and influence of recreational satisfaction in malls on buying. Data was collected administering pre-coded structured questionnaires to 1200 customers who were selected following a purposive sampling and snowballing technique. Information collected though the questionnaires were reviewed for each respondent to ascertain quality and fit for analysis.

Data Collection Tools

The study was conducted during 2005-08 in different festival seasons broadly categorized as three seasons April-June (Spring sales following the occasions of Easter vacations, mother's day and father's day), July-August (Summer sales) and November-January (Winter sales following prolonged Christmas celebrations), when point of sales promotions were offered frequently by the selected retail stores located in large shopping malls. February, September and October months are observed to be lean seasons for shopping among residents. The data collection process was initiated in July 2005 and terminated in June 2008 covering 9 shopping seasons during the study. A focus group session was organized with potential respondents to identify most appropriate variables for the data collection. Accordingly, 45 variables which were closely related towards influencing the shopping arousal and customer satisfaction on point of sales promotions were selected and incorporated in the questionnaires. The questionnaires were pilot tested

to 225 (14.06 percent of total sample size) respondents randomly selected, and finalized after refining them based on the responses during the pilot study. The variables selected for the study have been broadly classified into economic and behavioral variables as exhibited in Table 1.

//Table 1 about here//

A mall intercept survey was conducted, and visitors to malls were asked where they live and whether they came from home. More attractive malls are expected to attract customers from greater distances. A questionnaire was developed to investigate the extent to which point of sales promotions have influenced the buying behavior, derived postbuying satisfaction and augmented the volume of sales of the retail stores. The pre-test of the preliminary questionnaire on measuring the influence of point of sales promotions on stimulated buying behavior indicated that promotion offers introduced by the retailers acted as strong stimuli for the regular and new shoppers. Based on responses from the pre-test, the final questionnaire necessitated no significant changes. The questionnaires were translated in Spanish. All care was taken about the terminology and language being employed in each version of the questionnaire. The variables used in the questionnaire for data collection include various perspectives of customer satisfaction and promotional practices offered by the retailers to gain competitive advantage, optimal market share and higher aggregate sales. The descriptive statistics of the data sets for the variable segments used in the analysis of the study is exhibited in Table 2.

//Table 2 about here//

Data was collected by means of personal interviews by undergraduate students of international commerce and marketing who hand-delivered the questionnaires to the key

respondents in the self-service retail stores who had agreed to be the subjects of the research investigation. In most cases, the respondents completed and returned the questionnaires on the predetermined date.

Response Trend

Questionnaires were administered to 1600 respondents. However, during the process of data analysis, questionnaires of 124 respondents were omitted due to paucity of information. In all 1476 respondents were covered under the study and the usable response rate was 92.25 percent. The non-response bias has been measured applying two statistical techniques. Firstly, telephonic conversations were made with 20 randomly selected non-respondents responding to some general questions about sales and services policies of the dealers (Gounaris et al, 2007). *T-tests* were used to ascertain emerging differences between respondents and non-respondents concerning the issues pertaining to market orientation and customer services strategies. No statistically significant differences in pre-coded responses (a = 0.05) were found. A second test for non-response bias examined the differences between early and late respondents on the same set of factors (Armstrong and Overton, 1977) and this assessment also yielded no significant differences between early and late respondents.

Construct of Measures

Location, accessibility and ambience of shopping malls is measured with 21-variables (logistics related- VS_1 -9 and ambience related VS_2 -12) self-appraisal perceptual scale derived originally on the basis of focus group analysis as referred in the pretext. All variables selected for the study are exhibited in Table 1. Motivation about this construct

has been derived from an original scale developed by Narver and Slater (1990) on market orientation, who conceptualized it as a multivariate construct comprising customer orientation, competitor orientation and inter-functional coordination as principal behavioral components. This scale also comprised triadic decision coordination among shopping malls ambience, stores assortment and shoppers' preferences including long-term business horizon and shoppers' value (e.g. Ruekert 1992; Hunt and Morgan 1995). Impact of arousal and merriment, comparative advantages in shopping and store promotions in the shopping malls stimulate the buying decision and enhance overall satisfaction of customers and affect the frequency of visiting shopping malls. This phenomenon has been measured using 24-variable 'self-appraisal perceptual scale' which included cognitive variables referring to arousal and merriment (VS₃-10) and economic variables comprising competitive advantages (VS₄-6) and sales promotions (VS₅-8) offered by the retail stores in the shopping malls (e.g. Rajagopal, 2008a).

In this study, a five-point Likert scale was employed to measure the efficiency of customer services delivered by the automobile dealers in the study region. Respondents were asked, on a five-point Likert scale (anchored by strongly agree=1/strongly disagree=5), the extent to which quality management practices were implemented. The chi-square and comparative-fit index for the factor loadings were analyzed for the model. Measures had been validated and performance construct for the point of sales promotion was developed for the scores that emerged out the data analysis. Regression analysis was performed in order to ensure that the results on these constructs become non-correlated with the mutual interaction terms (Jaccard *et.al.*, 1990).

Structural Equation Model (SME)

Structural equation models are also known as simultaneous equation model. In order to analyze the effects of different variables identified in the study on the customer value of buying in the shopping malls, structural equations model is derived. Multivariate regression technique has been used to estimate equations of the model. These structural equations are meant to represent causal relationships among the variables in the model (Fox, 2002). Let us assume that the shopping attractiveness is S_x and shopping ambiance in malls is $M_t^{(i_1+i_2+i_3+...i_n)j}$ with leisure attractions $(i_1,i_2,i_3...i_n)$ in j^{th} mall at a given time t in a marketplace location h. Shoppers perceive value in buying products in the stores inside the malls stimulated by smart sales promotions B_{sp} wherein shopping arousal is driven by the ambience of shopping malls A_{am} and assortment of brand retail stores R_{bs} in a commercial place.

$$S_x = \sum_{t}^{jh} \left[M_t^{(i_1 + i_2 + \dots i_n)j} \right] B_{sp}, A_{am}, R_{bs}$$
 (1)

Hence

$$S_{x} = M_{p}^{jh} \frac{\partial q}{\partial t} = M_{p}^{jh} \frac{\partial b'}{\partial k} \frac{\partial k}{\partial t} = M_{t}^{in,j} \frac{\partial q}{\partial k} \left[B_{sp}, A_{am}, R_{bs} \right]$$
 (2)

Wherein M_p^{jh} denotes buying orientation of shoppers in a mall (j) at location (h), (q) represents the distance traveled by shoppers to mall in time t with preferential shopping interests (k). In the equation b' expresses the volume of buying during the visits to the shopping malls. The total quality time spent in shopping malls and buying goods; and customer services and level of satisfaction also increases simultaneously $(\partial_t/\partial_k > 0)$ and $(\partial_{b'}/\partial_k > 0)$. In reference to the size of mall x, preferential shopping interests (k) of

consumers create lower values with smaller size malls to $(\partial_k/\partial_x < 0)$ while the assortment of store in the shopping mall irrespective of sales promotions and price advantages, enhance the consumer value $(\partial_{b'}/\partial_x > 0)$. The location of shopping malls provides lesser enhancement in consumer satisfaction as compared to the assortment of stores, wide product options, sales promotions, re-buying attributes and customer services.

Therefore
$$\int b' \partial b' = \int B_{sp} + A_{am} + R_{bs} + V_b$$
 (3)

In the above equation V_b denotes the customer value generated in shopping with competitive advantage over time, distance, price and promotion.

In order to measure the cyclicality of shoppers visiting malls in the three festive seasons as discussed in the pre-text, initial robust weighting matrix and optimal weighting matrix were employed using the equation:

$$V_b = \frac{\partial b}{\partial k} (S_x) \left[\beta (\gamma_0 + \gamma_1 + \gamma_2 + \gamma_3) B_{sp} \right]_t^{jh}$$
(4)

The above equation represents frequent visits of the shoppers in mall (j) at location (h), ∂ denotes the consumer preference for the newly introduced products in the market, (γ_0) represents the visits to shopping mall influenced by physical variables, (γ_1) denotes visits to shopping malls influenced in reference to cognitive variables, (γ_2) shows the visits to shopping malls derived by the economic variables and (γ_3) indicates switching of shopping preferences from mall to traditional markets around large shopping malls, and (β) refers to the structural parameter relating to the endogenous variables to one another. Ordinary Least Square (OLS) method to measure the customer value for buying

in shopping malls (dependent variable) in reference to the above discussed physical, cognitive and economic variable (independent variables) has been computed using the construct as below:

$$V_{b} = \alpha + \beta_{1}(B_{sp}) + \beta_{2}(A_{am}) + \beta_{3}(R_{bs}) + \beta_{4}(S_{b'}) + \beta_{5}(S_{q}) + \beta_{6}(C_{tm}) + \beta_{6}(S_{hm}) + \varepsilon$$
 (5)

In the above equation $(S_{b'})$ denotes volume of buying by the shoppers in the malls, (S_q) represents distance travelled by the shoppers to visit the malls during the festive seasons, number of hours spent by customers in shopping malls per visit is indicated by (S_{hm}) , and (C_{lm}) shows the consumer preference to buy in traditional markets located around large shopping malls. The error term is denoted by ε in the above equation.

The model explains that the value based buying in shopping malls enhances the consumer satisfaction in reference to cognitive pleasure, value for money, reliability, safety, and comfort. However, market partitioning between malls and traditional markets around malls generates price sensitivity and product attractions. Traditional markets agglomerated around large shopping malls offer disruptive innovation products at lower prices. When low priced disruptive innovation products with easy to use versions are offered to the low and middle end consumers, store doing business in shopping malls with established brands are affected. Traditional markets around the shopping malls offering disruptive innovative products are always motivated to target up-markets than to defend low-end markets. Hence, traditional markets pose continuous threat to malls and play major role in dividing the customer preferences between them and shopping malls (Christensen *et al*, 2006). As a result, a sub-market consists of highly substitutable products and consumer values are reflected in their competitive gains, perceived use

values, volume of buying and level of quintessence with the customer relationship services of the retailing firms (Rajagopal, 2008).

Results and Discussion

Descriptive statistics of the data sets for the variable segments used in the analysis of the study is exhibited in Table 2.

//Table 2 about here//

Data has been input to the structural equations of the model discussed in the paper. Customer value (V_b) in shopping at malls is analyzed in reference to the equation (4) and results are exhibited in Table 3, wherein ∂ denotes the consumer preference for innovative products in the market, (γ_0) represents estimates the visits to shopping mall influenced by physical variables, (γ_1) denotes visits to shopping malls influenced in reference to cognitive variables, (γ_2) shows the visits to shopping malls derived by the economic variables and (γ_3) indicates switching of shopping preferences from mall to traditional markets around large shopping malls, and (β) refers to the structural parameter relating to the endogenous variables to one another. The structural parameters $(\gamma_0, \gamma_1, \gamma_2, \gamma_3)$ are measured as regression coefficients. Standard error in estimation is represented by SE in the above Table. The results reveal that long term customer values are associated with shopping in the malls while customer may derive short-term comparative gains over price and newness of products in shopping at traditional market surrounding large malls. The estimations represent for all the observations of the study and standard error has been calculated accordingly.

//Table 3 about here//

In the above Table, estimates of major variables are adjusted to the seasonality pattern of visits to shopping mall using a fixed 4 weeks time lag of each explanatory variable and included in the regressions. It is observed from the results that shopping at malls is highly influenced by the physical, cognitive and economic variables. Also, the results reveal that preference of buying in traditional markets around the malls is high which indicates the attitude of switching established store brands available in mall with the traditional unfamiliar brands. The cognitive factors among consumers in brand switching include product attractiveness, low price, user friendly technology and easy product servicing policies of small retail outlets outside the shopping mall. However, the cyclicality (upon lagged by 4 weeks cycle) of visit to the shopping malls has shown positive trend and statistically significant impact on leisure shopping during the festive seasons ($\beta = 0.8467$). Accordingly, the results exhibited in Table 3 are consistent with hypotheses H1 (a) and H1 (b).

Results concerning impact of various relational variables including sales promotion, ambiance, assortment of stores, distance travelled to visit the shopping mall and preference for traditional markets on volume of buying and customer value of buying are exhibited in Table 4. Variables measured in this Tables refers to the construct of equation (5) discussed in the paper.

//Table 4 about here//

Results presented in the above Table show that sales promotions offered in large shopping malls (LS) have higher impact (91.12 percent) on customer value in buying goods and services as compared to other categories of malls, because LS malls attract

middle and upper middle economic class consumers who are sensitive to price and volume promotion of the products and services. Extra large shopping (XLS) malls comprise of large departmental stores and brand retail stores which offer premium products attracting high consumer segment of economic class. Thus, sales promotions do not affect the customer value in buying products of exclusive brands. However, shopping arousal in XLS malls has higher impact (81.43 percent) on customer value in buying products and services than other categories of shopping malls, though the volume of buying is lowest (61.06 percent) in XLS category of malls. A principal reason for higher shopping arousal in XLS malls is the large assortment of stores (90.22 percent) in comparison to other types of shopping malls. Small shopping malls (SS) have assortment of fewer retail stores (36.11 percent) which provide lesser opportunity of sales attractions and lower shopping arousal to the customers though the volume of buying (75.43) percent) is found highest in SS malls. Three major attributes of shoppers including shopping frequency, average buying value and number of stores visited in the shopping malls were analyzed with respect to each shopping season during the study period. The results are graphically illustrated in Figure 2 which reveals that ratio of frequency of visits to value of buying increases with the hierarchy of shopping malls except small shopping malls. It is found that ratio of frequency of visit to the value of buying in medium, large and extra large shopping malls is 1:325.65, 1:581.69, and 1:656.66 Mexican Pesos² respectively.

//Figure 2 about here//

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² Average exchange rate of US Dollar to Mexican Peso (MXN) in June 2008 was 1USD=10.65 MXN

It is observed from the results that shopper spend more money in each visit to the extra large shopping malls due to the planned shopping agenda without higher perceived risk. Inclination towards buying familiar brands in large shopping malls also helps customers on purchasing goods of higher value as compare to other categories of shopping malls. The adjusted \overline{R}^2 indicates that overall changes in the customer value is observed to be 67.53 percent in SS malls, 55.86 percent in MS malls, 79.86 percent in LS malls and 66.42 percent in XLS malls during different shopping seasons. Accordingly it is found that there is a patter of shopping in malls in synchronization to arousal-buying relationship during the shopping life cycle. Hence, the findings discussed above are consistent with hypotheses H1 (c) and H2 (a).

It is also observed from the results of the Table 4 that the attractive ambiance in the XLS malls motivates shoppers to stay for long hours in the mall (92.77 percent) and induce them for casual shopping. LS malls also attract customers to stay for reasonably longer time (61.13 percent) as compared to MS and SS malls. The results also reveal that seasonality in shopping stimulate the visits to shopping malls with a small time lag of approximately 4 weeks or 28 days. However, customers do not consider the distance factor to visit the malls. These results conform to the hypothesis **H2 (b)** of the study.

The *beta* coefficient is measured to know the volatility of customer preferences among familiar and non-familiar brands, malls for shopping, and retail stores. It is observed that shoppers in festive seasons look for new products which are innovative and technology based, irrespective of brand. The festive shopping seasons in Mexico have fixed dates. Of

these Christmas is the major leisure shopping season which attracts voluminous buying as compared to the shopping on the Mother's and Father's days. The leisure shopping attractions begin in July and rise to peak during November-December, augmenting the consumer's opportunities to make impulsive purchases for both gifts and items for personal use. The Christmas shopping season is slightly extended till the first week of January as the January 6th every year is the 'Twelfth night' or 'Epiphany' when children receive gifts from three wise men or magic kings as observed in the social customs in Mexico. It may be seen from the Table 5 that volume of buying is higher among non-familiar brands.

//Table 5 about here//

In the above Table column 2 shows the effect of new product varieties among familiar brands and column 3 reveals new product varieties among non-familiar brands. These two columns have no control variables while computing beta coefficients while physical, cognitive and economic variables have been considered as control variables to determine loyalty effects. It has also been observed during the study that small and medium size shopping malls function within budget constraints and often restrain their expenditure on ambiance building, thus flow of shoppers remain relatively low as compared to large and extra large size shopping malls. Beta-coefficient results explains that variety seeking behavior among non-familiar brands during the festive seasons is higher for small and medium shopping malls (64.61 and 79.21 percent respectively) while customers prefer new products among the known brands in the large and extra large shopping malls (74.11 and 91.77 percent respectively). The competitive sales promotion strategies such as free trials, hands-on-experience, simulations and the like among the

retail stores in the malls also induce the shoppers to seek variety products. However, customers' loyalty is higher for large and extra large shopping malls which have good ambiance, brand retail stores, and shoppers' gentry, while the functional variables like price and sales promotions influence the shoppers' loyalty in the small and medium size malls. These results are consistent with hypothesis **H3**, indicating that competitive sales promotions of retail stores in shopping malls induce variety seeking behavior and build store loyalty among shoppers

Managerial Implications

Shopping mall are dynamic business centers which attract a large section of urban customers for experiencing modern shopping pleasure. A categorically planned assortment of stores in a mall would provide diversity, arousal and propensity to shop around the mall. Accordingly, mall managers may develop appropriate tenancy policies for retailing firms in reference to the socio-demographic factors of customers to satisfy different segments. An appropriate mix of anchor tenants and new age tenants who have different target groups would better attract customers to shopping malls and such assortment of stores could co-exist in a shopping mall successfully without any conflict of interest. Prospective shopping malls should be able to nurture an environment conducive to the development of all components in the system for successful positioning of malls.

In view of growing competition among retailers and increasing market congestions in urban areas, retailing firms need to adapt to a dynamic strategy for gaining success in the business. Retailers located in large and extra large shopping malls where intensity of competition is higher should lure customers into non-price promotions and develop niche of customers to build brand loyalty. If a retailing firm chooses to compete on price, complex pricing actions, cutting prices in certain channels, or introducing new products or flanking brands strategies may be used, which lets the firm selectively target only those segments of the customers who are at the edge of switching brands or retail outlets. Such strategies may be implemented in specific malls. The promotional effects generated from various promotional tools may be monitored for longer periods of time and measured in reference to achieving the long-term goals of retail firms. Also, variability of promotional response in different retail markets, channels and outlets should be analyzed for making required modifications in the process of delivery of promotional programs to the customers. Firms should focus on providing information about retailers' offers before hand for the customers who make their purchase decisions prior to mall visit. However, social and recreational appeals for attracting consumers to the mall also act as driving factors in augmenting the customer traffic to the shopping malls.

Managers of retailing firms must understand that shopping behavior among customers is governed by various platforms such as credit availability and customer services offered in the shopping mall. Platforms that successfully connect various customer groups with shopping interests continue to build strength to the retail brands, stores and malls. At the retail point of purchase convergence of customer loyalty, value for money and competitive product advantages drive the loyalty to retail stores. Most successful retail

brand stores pass through certain recognizable stages which affect customer decisions on marketing factors such as pricing, product identity, and sales and distribution networks.

Conclusion

The perspectives of shopping mall ambience and shopping satisfaction effectively become a measure of retailing performance, customer attraction and propensity to shop for urban shoppers. This tendency of shoppers demands for change in the strategy of mall management and retailing by offering more recreational infrastructure, extended working hours, place for demonstrations and consumer education on the innovative and high technology products and services. This study discusses the impact of growing congestion of shopping mall in urban areas of Mexico on shopping conveniences and shopping behavior in reference to personality traits of shoppers affecting the preferences for shopping malls in reference to store assortment, convenience, distance to malls, economic advantage, and leisure facilities. The results of the study reveal that ambiance of shopping mall and assortment of stores in the mall attracts higher customer traffic to the malls. However, agglomeration of small retail stores around large shopping malls in a traditional style, deviate consumers' shopping focus from stores inside the mall as they get ethnic ambience and economic gains in buying with small retailers. It is found during the study that urban shoppers visit shopping malls as leisure centers to relax spending long hours and tend to shop in response to various sales promotions employed by different stores.

The discussions in the study divulge that shopping arousal is largely driven by mall attractions, inter-personal influences, sales promotions and comparative gains among urban shoppers. Major factors that affect shopping arousal among urban shoppers are in reference to recreational facilities, location of the mall, ambiance and store attractiveness in reference to products and services, brand value, and price. Like many other empirical studies this research might also have some limitations in reference to sampling, data collection and generalization of the findings. The samples drawn for the study may not be enough to generalize the study results. However, results of the study may indicate similar pattern of shopping behavior of urban consumers in shopping malls also in reference to other Latin American markets.

References

Anselmsson, Johan (2006), Sources of customer satisfaction with shopping malls: A comparative study of different customer segments, *The International Review of Retail, Distribution and Consumer Research*, 16 (1), 115-138

Blois K, Mandhachitara R and Smith T (2001), Retailing in Bangkok: an intriguing example of agglomeration, *International Journal of Retail & Distribution Management*, 29 (10), 472-479

Backstrom, K. (2006), Understanding recreational shopping, *International Review of Retail, Distribution and Consumer Research*, 16 (2), 143-158

Carter, C. C. and Vendell K. D. (2005), Store location in shopping centers: Theory and estimates, *Journal of Real Estate Research*, 25 (3), 237-265

Christensen, C., Baumann, H., Ruggles, R., and Sadtler, T. (2006), Disruptive innovation for social change. *Harvard Business Review*, 84(12), 94-101

Craig, A. M. and Turley, L. W. (2004), Malls and consumption motivation: an exploratory examination of older generation and young consumers, *International Journal of Retail & Distribution Management*, 32 (10), 464-475

d'Astous, A. and Jacob, I. (2002), Understanding consumer reactions to premium-based promotional offers, *European Journal of Marketing*, 36 (11), 1270-1286

Demographia (2008), http://www.demographia.com/db-mxcward.htm

Dixon, T. and Marston, A. (2005), Taking the shopping centre online: new models in e-commerce, *Property Management*, 23 (2), 97-109

Dobson, J. (2007), Aesthetics as a foundation for business activity, *Journal of Business Ethics*, 72 (1), 41-46

El-Adly, M. I. (2007), Shopping malls attractiveness: a segmentation approach, *International Journal of Retail & Distribution Management*, 35 (11), 936-950 Feng, J., Zhou, Y., and Wu, F. (2008), New trends of suburbanization in Beijing since 1990: From government-led to market-oriented, *Regional Studies: The Journal of the Regional Studies Association*, 42 (1), 83-99

Fox, J. (2002), An R and S-Plus Companion to Applied Regression, Thousand Oaks, CA: Sage

Gómez, M. I., Maratou, L. M., and Just, D. R. (2007), Factors affecting the allocation of trade promotions in the U.S. food distribution system, *Review of Agricultural Economics*, 29 (1), 119-140

Ibrahim, M. F., and Galven, T. W. R. (2007), New age retail tenants: A new phenomenon, *Journal of Retail and Leisure Property*, 6 (3), 239-262

Kok, H. (2007), Restructuring retail property markets in Central Europe: impacts on urban space, *Journal of Housing and the Built Environment*, 22 (1), 107-126

Kuruvilla, S. J. and Ganguli, J. (2008), Mall development and operations: An Indian perspective, *Journal of Retail and Leisure Property*, 7 (3), 204-215

Léo, P.Y. and Philippe, J. (2002), Retail centres: Location and consumer's satisfaction, *The Service Industries Journal*, 22 (1), 122-146

Loafland, J. (1985), Protest: Studies of collective behavior and social movements, New Brunswick, NJ, Transaction Books

McGoldrick, P. J. and Pieros, C. P. (1998), Atmospherics, pleasure and arousal: The influence of response moderators, *Journal of Marketing Management*, Volume 14 (1-3), 173-197

Maronick, T. J. (2007), Specialty retail center's impact on downtown shopping, dining, and entertainment, *International Journal of Retail & Distribution Management*, 35 (7), 556-568

Mattila, A. S. and Wirtz, J. (2004), Congruency of scent and music as a driver of in-store evaluations and behavior, *Journal of Retailing*, 77 (2), 273-289

Menon, S. and Kahn, B. (2002), Cross-category effects of induced arousal and pleasure on the internet shopping experience, *Journal of Retailing*, 78 (1), 31-40

Miranda, M., Konya, L. and Havira, I. (2005), Shopper's satisfaction levels are not only the key to store loyalty, *Marketing Intelligence and Planning*, 23 (2), 220-232

Morschett, D., Swoboda, B. and Foscht, T. (2005), Perception of store attributes and overall attitude towards grocery retailers: The role of shopping motives, *International Review of Retail, Distribution and Consumer Research*, 15 (4), 423-447

Nicholls, J. A. F. (1997), Time and companionship: key factors in Hispanic shopping behavior, *Journal of Consumer Marketing*, 14 (3), 194-205

Ooi, J. T. L. and Sim, L. L. (2007), The magnetism of suburban shopping centers: do size and Cineplex matter? *Journal of Property Investment and Finance*, 25 (2), 111-135

Parsons, A. G. (2003), Assessing the effectiveness of shopping mall promotions: customer analysis, *International Journal of Retail & Distribution Management*, 31 (2), 74-79

Parsons, A. G. and Ballantine, P. W. (2004), Market dominance, promotions, and shopping mall group performance, *International Journal of Retail & Distribution Management*, 32 (10), 458-463

Platz, L. A. and Temponi, C. (2007), Defining the most desirable outsourcing contract between customer and vendor, *Management Decision*, 45 (10), 1656-1666

Rajagopal (2006), "Leisure shopping behavior and recreational retailing: a symbiotic analysis of marketplace strategy and consumer response", *Journal of Hospitality and Leisure Marketing*, 15 (2), 5-31

Rajagopal (2007), Stimulating retail sales and upholding customer value, *Journal of Retail and Leisure Property*, 6 (2), 117-135

Rajagopal (2008), Time sharing at leisure facility centers: analysis of sales performance indicators, *Journal of Retail and Leisure Property*, Vol. 7 (3), 248-262

Rajagopal (2008a), Consumer response and cyclicality in new product management, Journal of Customer Behaviour, 7 (2), 165-180

Roth, A. E. (2008), What have we learned from market design? *The Economic Journal*, 118 (527), 285-310

- Shy, O. and Stenbacka, R. (2008), Price competition, business hours and shopping time flexibility, *The Economic Journal*, 118 (531), 1171-1195
- Teller, C. (2008), Shopping streets versus shopping malls determinants of agglomeration format attractiveness from the consumers' point of view, *The International Review of Retail, Distribution and Consumer Research*, 18 (4), 381-403
- Timothy, J. R. and Stephen, F. H. (2006), Rivalry in price and variety among supermarket retailers, *American Journal of Agricultural Economics*, 88 (3), 710-726
- Wakefield, K. L. and Baker, J. (1998), Excitement at the mall: Determinants and effects on shopping response, *Journal of Retailing*, 74 (4), 515-539
- Wang, L. and Lo, L. (2007), Global connectivity, local consumption, and Chinese immigrant experience, *GeoJournal*, 68, (2-3), 183-194
- Wirtz, J., Mattila, A. S. and Tan, R. L. P. (2007), The role of arousal congruency in influencing consumers' satisfaction evaluations and in-store behaviors, *International Journal of Service Industry Management*, 18 (1), 6-24

Table 1: Variables Chosen for the Study

Physics	al variables	Cognitive variables	Econo	omic variable
Logistics Related	Ambience Related	Arousal and	Comparative	Sale promotion based
		Merriment		
$VS_{1}(9)$	$VS_2(12)$	$VS_3(10)$	VS ₄ (6)	VS ₅ (8)
Distance	Peripheral mall ambience	Creative sales events	Value for money	Promotional attractions
Public transport	Inside mall ambience	Product demonstration	Price sensitivity	Products display
Feeder roads to	Flowers and vegetation	In-store advertising	Quality difference	In-store ambience
shopping mall	Air conditioning	Hands-on experience	Customer service	Availability
Car parking	Lighting	Customer interaction	Cross promotion	Length of promotion
Convenience for	Public audio-video system	Recreation	Competitiveness	Responsiveness
disabled and senior	Recreational place	Sensory appeals		Value added benefits
citizens	Ethnicity	Free samples and gifts		Partners of promotion
Public phone booths	Hallway and shopping	Newness of products		
Security standards	space	Health oriented		
Information booth	Relaxing benches			
Evacuation path	Terrace attractions			
	Social status			

VS=Variable Segment. Figures in parentheses indicate number of variables

Table 2: Descriptive Statistics for the Selected Variable Groups for the Study

Variable Groups	$VS_1(9)$	$VS_2(12)$	VS ₃ (10)	VS ₄ (6)	$VS_5(8)$
Sample Size	1476	1476	1476	1476	1476
Mean	5.309	7.681	7.443	6.291	4.836
Standard Deviation	0.875	0.629	0.643	0.833	.916
Standard Error	0.082	0.073	0.051	0.066	0.068
Skewness	-0.946	-1.122	-0.639	-0.770	-0.643
Sample Variance	0.655	0.596	0.482	0.794	0.804
Data reliability test- Cronbach (α) scores	0.84	0.76	0.88	0.82	0.74

VS=Variable Segment. Figures in parentheses indicate number of variables

Table 3 Estimations of Structural Equations

Study Area	Parameters											
Shopping Clusters		N	(V_b)	(γ_0)	(γ_1)	(γ_2)	(γ_3)	(β)	SE	(∂)	р	Chi- Square
SS (1-50)	5	399	0.7366	0.7713	0.7541	0.8301	0.7302	0.6303	6.9971	4.2201	0.6220	128.06
MS (51-100)	3	284	0.8012	0.8308	0.8299	0.7491	0.9182	0.9222	5.1285	5.6539	0.5351	163.72
LS (101-150)	4	435	0.8561	0.7263	0.8202	0.8105	0.8871	0.9373	6.3277	4.7112	0.5219	184.20
XLS (151-200)	2	358	0.9366	0.8913	0.9310	0.8224	0.9586	0.8917	5.4666	5.0010	0.5914	176.44
Overa	all	1476	0.9251	0.8849	0.8504	0.8329	0.9154	0.8467	5.899	4.513	0.5136	236.72

SS= Small size malls, MS=Medium size malls, LS= large size malls, XLS= Extra large malls.

Figures in parentheses indicate number of shops in malls.

Table 4: Impact of Relational Variables on Customer Value in Buying at Shopping Malls vs. Traditional Markets

(n=1476)

Analytical variables ^a	SS (5)	MS (3)	LS (4)	XLS (2)	Overall
Sales promotions (B_{sp})	0.6297*	0.7538*	0.9112*	0. 8366*	0.7932*
Arousal in shopping malls (A_{am})	0.4715**	0.6296*	0.7197*	0.8143*	0.7224*
Assortment of stores (R_{bs})	0.3611	0.5420**	0.7506*	0.9022*	0.8633**
Volume of buying $(S_{b'})$	0.7543*	0.7510*	0.8457*	0.6106*	0.7625*
Distance travelled to malls (S_q)	0.3145	0.3026	0.3874	0.3544	0.3136
Time spent in shopping malls (S_{hm})	0.3820	0.4904**	0.6113*	0.9277*	0.6491*
Preference for traditional markets (C_{tm})	0.6430*	0.9874*	0.8861*	0.9417*	0.8445*
Constant	0.1439	0.2215	0.3499	0.1079	0.2115
\overline{R}^2	0.6753*	0.5586**	0.7986*	0.8413*	0.6642*

^a=Variables are described in equation (5)

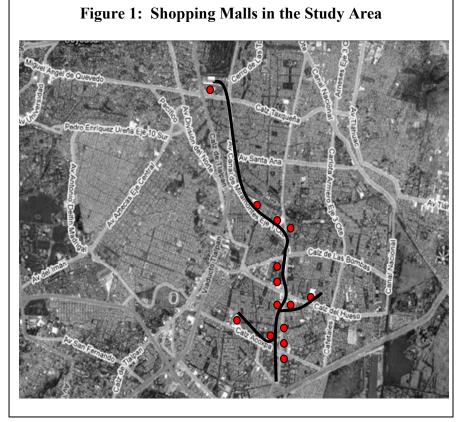
p value * > .01 and ** > .05

Table 5: Beta Coefficient Measures for Variety Seeking Behavior and Loyalty

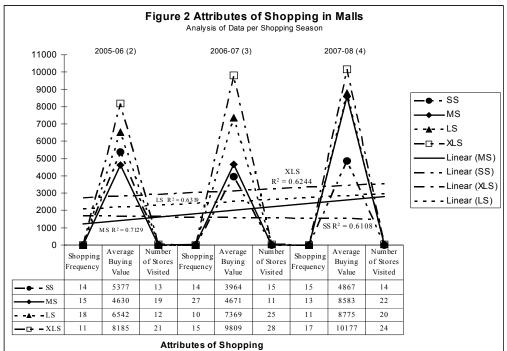
(n=1476)

Shopping Mall	Leaning tov	vards variety	Shopping Loyalty			
Category	Familiar Brands	Unfamiliar Brands	Mall	Retail Store		
SS	0.3538 (0.4324)	0.6461* (0.3270)	0.4126 (0.3629)	0.5779** (0.1002)		
MS	0.4820 (0.2691)	0.7921* (0.4725)	0.4929** (0.3904)	0.5799** (0.2772)		
LS	0.7411* (1.904)	0.3049 (0.2409)	$0.7003^* (0.4444)$	0.5190** (1.1222)		
XLS	0.9177* (0.7460)	0.1826 (0.5781)	0.8321* (0.4981)	0.5412** (0.5866)		
Overall	0.5238** (1.3170)	0.5314** (0.1455)	0.6624* (0.1992)	0.5424 **(1.3101)		

- p-values * >.01 and ** >.001
- In the above Table coefficients represent the marginal effects on the average time spread associated with the introduction of new products
- Each cell represents separate regression
- Figures presented in parentheses indicate standard errors



Source: Google Earth



Figures in parentheses indicate number of shopping seasons.

SS= Small shopping mall, MS=Medium shopping mall, LS=Large shopping mall and XLS= Extra large shopping mall.

Average Buying Value is indicated in Mexican pesos. Average exchange rate of US Dollar to Mexican Peso (MXN) in June 2008 was 1USD=10.65 MXN