Determinants of Shopping Behavior of Urban Consumers

(Keywords: Shopping mall, multi-channel retailing, consumer behavior, customer-centric strategy, market attractiveness, customer satisfaction)

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Abstract

This study explores the influence of geo-demographic settings of commercial centers, customer attractions in shopping malls, and route to shopping of urban shoppers. The present research analyzes retailing patterns in urban areas in reference to customer orientation strategies, product search behavior and enhancing the customer value. Interrelationship among urban retailing, marketplace ambiance, conventional shopping wisdom of customers, long-term customer services, and technology led selling processes are also addressed in the study based on empirical survey. Broadly, this study makes contributions to the existing research in urban retailing towards factors determining shopping attractions, routes to shopping, and establishing the customer-centric strategies of the firms.
Introduction

Country towns can often provide attractive and distinctive visitor locations for urban residents. Attracting urban visitors can help alleviate problems of maintaining trade for their town centers. Despite this potential, little is known about how urban residents view country towns and what they find attractive. Through the use of focus groups and questionnaire surveys, the research demonstrates the key attraction of country towns to be that of providing something different from the city in terms of history, tradition and shopping. An important element of this attraction is the socially constructed meaning of the term *market town*, which reflects the size, history and tradition of these towns as well as their rural hinterland linkages. Indeed, visitor rates were highest for the most typical market towns. This is particularly reflected in shopping patterns, where there are expectations in terms of local food and crafts. Owing to the need for most towns to maintain their *core* local trade, the paper has also considered the consistency of efforts to encourage both urban visitors with resident populations. Although there are some parallels, particularly where people have moved to country towns in order to experience their ‘different from the city' character, care must be taken to balance the potential of attracting urban residents and that of maintaining the rural service centre functional role (Powe, 2006)

Urban shopping environments demonstrate new opportunities and challenges for retailers and shoppers. Retailers in urban locations attempt to both attract shoppers and retain them in their immediate trade areas. In this way both retailers and shoppers understand the dynamics of competitive advantages to shop in urban retailing settings. Such shopping behavior of consumers is mostly observed during the holiday season that fills enormous stimuli for leisure shopping (Smith, 1999). Growing shopping motivations have induced the basket shopping behavior over branded shopping traits among urban consumers. The basket shopping may be defined as a kind of compulsive shopping led by the sales promotions offered by the retailers (Guy, 2007). Basket shopping attitude of urban shoppers is also an outgrowth of store checkout buying decision due to the point of purchase promotions in the retail stores. There is a general belief that products bought at
store checkouts are selected on hasty inclinations. However, not all checkout purchases can casually be referred to as impulsive because what items shoppers select at checkouts indicate conscious concern with making efficient use of their shopping time (Quelch and Canon, 1983; Miranda, 2008).

The objective of this study is to analyze the impact of geo-demographic locations of commercial centers, customer attractions in shopping malls, and route to shopping of urban shoppers. The study also examines the retailing patterns in urban area in reference to customer orientation strategies, product search behavior and enhancing customer value. Interrelationship among urban retailing, marketplace ambiance, conventional shopping wisdom of customers, long-term customer services, and technology led selling processes are discussed in the study based on empirical survey. Broadly, this study makes contributions to the existing research in urban retailing towards factors determining shopping attractions, routes to shopping, and establishing the customer-centric strategies of the firms.

**Conceptual Development**

There has been large number of empirical research studies contributing to the marketing literature that focuses on shopping behavior of urban consumers. This literature can be categorized into two broad areas referring to multi-channel retailing and shopping attractions influencing behavior of urban consumers. Most research studies on consumer behavior, satisfaction and customer service uphold that discrepancies between expectations of a buying experience and the post-buying satisfactions are the best predictors of the sustainable consumer behavior and prolonged satisfaction on shopping decisions perceived by the customer (e.g. McQuitty and Patterson, 2000; Oliver 1977, 1980; Parasuraman et al, 1988). Previous empirical studies have indicated that more and more marketing firms including retailing enterprises are following increasingly broad variety of routes to market leading to multi-channel retailing strategies (Coughlan et al, 2006; Jindal et al, 2007).
Several explanations of consumer behavior have been advanced over time, but the expectations-disconfirmation paradigm has contributed significantly to the research over time (e.g., Patterson and Spreng, 1997). The economic perspectives of consumer behavior has been explored in the research studies through various models during the post-globalization shifts in market considering interrelated variables including life cycle consumption patterns, lifestyles, brand loyalty, choice of features, and search behavior. Consumer research addressing the socio-cultural, experiential, symbolic and ideological aspects of consumption have also been discussed in the conceptual research studies which reviewed the literature since mid-eighties and argued enduring misconceptions about the nature and analytic orientation of consumer culture theory (Ratchford, 2001; Arnould and Thompson, 2005).

Research studies have also been conducted in the past to explore the concept of consumer ambivalence in urban marketplaces in reference to expectation versus reality, conflict with purchase decisions, influence of referrals and personality traits (Otens et al, 1997). The multi-channel retailing provides more indicators for decision making and sets the route to shopping for consumers. Urban consumers engage themselves in information gathering and product search before making buying decision. The routes to shopping provide distinct store formats for the competitive bargains and higher customer satisfaction (Narver and Slater, 1990). Because of the increasing market competition and broadening of marketing channels, customers are becoming increasingly sophisticated in their information gathering and product search (Nunes and Cespedes, 2003). Hedonic values of consumer motivations in shopping diverge for different shopping locations and malls, and products categories. Shopping in the malls located in premium locations offers not only significant scope for pleasurable emotive appeals to boost consumers' status but also enhances the social image. Some studies identified opportunities for retailing firms to create good feelings by engaging shoppers' attention on themes relating to social and family values (Miranda, 2009).

This paper presents set of hypotheses, describes the sampling method and data, and explains the construct of measures. The model specification and estimation, results and
findings of the study are also organized in this paper. Finally, discussion in this paper throws light on some limitations of the study and provides directions for further research.

**Review of Literature and Framework of Hypotheses**

**Shopping Localities**

Globalization has prompted multitude of shopping malls in urban commercial centers over recent past but it is observed that communities are increasingly looking to land use planning strategies to reduce drive-alone travel. In view of the shifts in the shoppers’ mobility options, many planning efforts aim to develop neighborhoods with higher levels of accessibility that will allow residents to shop closer to home and drive lesser distance (Krizek, 2003). The accessibility to shopping centers of consumers within cities is not homogenous as shopping opportunities vary according to common expectations merchandise promotions and personality traits of shoppers. Besides the role of distance in predicting accessibility to shopping centers and buying behavior, time is another important factor, which determines the shopping behavior of urban consumers. Congestion in shopping malls and business hours also lead to further reductions in accessibility and shopping intensity of urban shoppers (Weber and Kwan, 2002).

Proximity to shopping centers largely influences also the choice of residence of urban dwellers. The location preferences largely depend on income and housing budget, proximity to good schools and shopping centers (Chiang and Hsu, 2005). There is also positive interrelationship among shop size in terms of products assortment, space allocation and in-store ambiance in a shopping mall which stimulates the buying behavior among urban shoppers. It is observed that bigger shops and trading spaces of non-impulsive products and services in shopping mall are more likely to be found at upper floors which discourage casual shoppers to explore for shopping. Shoppers visit such store with pre-planned agenda and those buyers who have explicit store or brand loyalty (Yiu et al, 2008). The space and business relationship in retailing is also classically argued as the size of a market area results from the spatial range of the demanded and
supplied goods and services. Hence, the distance-sales relations or price-sales relations produce overlapping and interconnecting sales implications in retailing (Löffler, 1998). However, the retailing industry is continuously adapting itself to changing demographic conditions, consumer behavior and economic conditions. New forms of shopping centers and hypermarkets are being constructed in locations far from the traditional shopping guilds and are generally located near a major road or highway intersection. This out-of-town commercial development has also shown impacts on shopping behavior of urban consumers in reference to established city centers. On the contrary some management studies argue that though the existing retail units are getting larger in order to achieve economics of scale; new forms of large-scale retailing do not fit easily in the traditional spatial pattern of retail concentrations (Brotchert, 1998; Balsas, 2000).

**H1 (a):** Accessibility and proximity to the shopping centers from dwelling place and among different shopping malls determine the buying behavior of urban consumers

The growing commercial cities have faced reverse changes over time showing decline in the number of shops that sell space consuming goods in urban areas. However, the success of many shopping malls has emerged with the rise of small shops with improved ergonomics for accommodating less space consuming goods. The space consuming and heavy weight products are sold through virtual shops or catalogues stores. Such products are attractively displayed in small outlets in big shopping malls where shoppers are provided with comprehensive information on the products and services. New structural architecture should develop shopping locations in urban areas considering variables like shoppers’ accessibility, type of shops, tenancy pattern and floor space and shopping attractions which can encourage competitive retail entrepreneurship (Weltevreden et al, 2005). Marketplaces can attain high performance when they attract a large enough proportion of the potential buyers in the market and overcome the shopping congestion by developing shopper’s loyalty. Such marketplace strategy requires enough marketplace attractions, sales promotions and simple credit transactions. Also marketplace strategy
must play pivotal role in curbing the switching behavior of shoppers in alternative
channels or price sensitive markets (Roth, 2008).

In recent years, a productive dialogue has developed between retail geographers and
those social geographers concerned with the spatiality of consumption. It is argued that
the concept of shopping among urban shoppers has varied perceptions with an
understanding of the physical and economic parameters within which consumers operate.
In addition, the socio-spatial considerations also determine the consumer preferences in
retailing which is evident from the polarization of consumers in like-minded socio-spatial
shopping locations according to their respective socio-economic status. The shopping
rituals are found embedded in social relations that discourage particular shoppers from
visiting certain retail locations (Williams et al, 2001). In emerging markets shopping
malls with multiplexes such as cinema theatres, food courts, and amusement corners in
shopping malls for children are becoming the centre for family day out. Small retailers
have improved their services to cater to Indian consumers. In addition, services like
higher credit limits and domicile services are helping retail shops to acquire and retain
customers with their brand tags (Srivastva, 2008). It is observed that in growing cities
across the developing countries, lifestyle centers are booming favorite shopping locations
for urban consumers. A study conducted in the United States of America about the
impact of shopping locations on consumers’ patronage behavior revealed that shopping
orientation, importance of retail attributes, location advantages and beliefs about retail
attributes influence patronage behavior (Yan and Eckman, 2009).

\[ \text{H1 (b): Higher marketplace attractions and innovative lifestyle determinants of retailing firms encourage shopping behavior of urban customers} \]

\[ Retailing Channels \]

A route to market is a distinct process followed by customers towards buying a selected
product or services through a market channel. Globalization and growing urban retailing
practices have introduced multichannel retailing in the recent past. It is observed that multiple channel retail strategies enhance the portfolio of service outputs provided to the customer, thus enhancing customer satisfaction and ultimately customer-retailer dyadic loyalty (Frazier and Shervani 1992; Wallace *et al*., 2004). There are diverse communication strategies used by the retailing firms to attract shoppers which include closed circuit television in the shopping malls, public television commercials, advertisements in print media, and direct marketing. It is observed that urban shoppers showed confidence and fashion conscious shopping orientation, and catalog and internet shopping orientation as key predictors of customer satisfaction level with information search through multi-channels (Lee and Kim, 2008).

In emerging urban shopping centers the multichannel retailing provides a sustainable and attractive blend of new and existing retail formats for consumers. It has been observed in a research study that major components in channel choice among consumers include risk reduction, product value, and ease of shopping and experiential attributes (Mcgoldric and Collins, 2007). As the use of technology is increasing in retail channels, consumer's preferences significantly vary to shop among brick-and-mortar stores, catalogues, and e-retailers. The importance of retailers is spanning over multi-channel operations including brick-and-mortar stores, catalogues, and websites which has created an opportunity for consumers to choose products from a variety of retailers and retail channels lessening the probability that others have the same collection (Bickle *et al*., 2006). Retailers located in large shopping malls and busy streets retailers are increasingly adopting multichannel distribution strategies to defy the growth of online retailing and targeting potential shoppers through the physical and electronic channels as multiple routes to encourage purchase behavior (Nicolson *et al*., 2002).

The multi-channel retailing strategy caters to the wide preferences of shopping to the customers at varied price options. This strategy generates more routes to shopping for customers in reference to products and price differentiation. In multi-channel strategy retailers involve offering superior products, typically accompanied by superior service outputs, to be sold at relatively higher prices for premium market segment while low
price strategy is followed for mass market retail locations (Jindal et al., 2007). However, luxury goods are not commonly sold through the catalogue, e-bays or call centers and differentiated products usually need relatively more intermediary support to be delivered satisfactorily to the end customer. Urban shoppers incur higher search costs when searching for a product across retailing channels and gathering information on prices as the urban shoppers are more guided by the value form money considerations in shopping. It is observed that price-sensitive customers always intend to strike a beneficial deal over the costs they incur during searching for such bargain through various channel options (Rajagopal, 2008a). Thus,

**H2 (a):** Multi-channel retailing strategy of firms embeds a sales differentiation strategy which on one hand widens the consumer buying choices and lowers the price on the other

**H2 (b):** The higher the dominance of price sensitive behavior of urban customers, the broader would be the search for retailing channels to deal a better price

Some studies observed that there are striking changes in retailing practices with the increase of Internet usage among urban shoppers. The rise of non-store retailing in reference to direct marketing, catalogues, telephone, the Internet coupled with consumers' increased willingness to buy via these alternative channels, and the traditional retail stores either in shopping malls or on the streets do not seem to be necessarily a requirement in the present retailing environment (Crittenden and Wilson, 2002). Building and retaining a long-term association with customers require that relationship management applications should be able to accommodate the various channels. Multi-channel customers are the most valuable customers and hence multi-channel integration would improve customer loyalty and retention. Effective customer relationship in a multichannel retailing has significant impact on the customer decision-making process and driving buyer behavior in a competitive marketplace (Ganesh, 2004). Thus, a meticulously designed multi-channel set-up enables consumers to examine goods at one
channel, buy them at another channel, and finally pick them up at a third channel. Multichannel retailing offers synergies as it results into an enhancement of customer portfolios, revenue augmentation, and growth in the market share. Common attributes of a multichannel retail strategy include highly-integrated promotions, product consistency across channels, an integrated information system that shares customer, pricing and inventory data across multiple channels, an appropriate order processing system that enables customers to purchase products on e-portals or through a catalog used for direct marketing, and lower search cost to buy products from available multi-channel retailing opportunities (Bermen and Thelen, 2004).

**H2 (c):** The better customer-retailer relationships and shopping incentives in urban marketplace, the stronger would be the buyer orientation of customers.

Multi-channel retailing is gaining importance amidst the globalization strategies of multinational firms as the customer demands are growing for wider availability of buying options and greater convenience of purchase including benefits at the point of purchase and post-purchase support. Previous empirical research studies have evidenced that retailing firms are adopting an increasingly broad variety of routes to market by ways of introducing multi-channel retailing interface to facilitate urban shoppers (e.g. Coughlan et al 2006, Sa Vinhas and Anderson 2005, Wiertz et al 2004). Firms following multi-channel retailing usually vary in their level of customer focus, or towards the magnitude of fulfilling customer needs and delivering customer satisfaction. This difference may be due to the attributes of the route to shopping through the channel and associated services of the channel. A firm with strong customer-focus beliefs strives in catering to the customer needs and delivering maximum satisfaction by ensuring a pleasant, positive, and value-adding purchase experience, which requires the commitment and support of the channel managers in integration with the corporate philosophy of the retailing firm (Jindal et al, 2007, Rosenbloom 1997). A market research conducted by Sony Electronics Inc. showed that conventional electronics stores did not sell the products and services of the company successfully to women customers. It was observed that poor selling
strategies of franchisee retail store not only lowered the revenue on sales but also
developed poor customer relations causing incidence of dissatisfaction among existing
and potential customers. Consequently, Sony opened company-owned store outlets with
the explicit objective of filling this gap and strengthening customer-focused philosophy
of the company (Spagat, 2004).

**H2 (d):** The stronger the customer-focus beliefs of a firm, the stronger the
marketplace loyalty of customers in urban shopping locations.

In general, most of these empirical studies have focused the induction of a direct channel,
usually a web store in order to stimulate the shopping behavior of urban consumers. The
retailing channel structure in urban areas has two dimensions which include virtual
channel or route and physical shops in shopping malls with the embedded Internet
information portals. The virtual retailing channels that encourage customer on shopping
only through web channel or catalogue stores illustrate the variety dimension while brick-
and-mortar retail store show the intensity dimension of retailing channels (Coughlan *et al* 2006).

*Ambiance and Customer Satisfaction*

Urban consumers make holistic evaluations of shopping malls in view of the quality of
ambiance and extent of arousal for shopping. Consumers find the environment
significantly positive and exhibit higher levels of approach and impulse buying
behaviors, and experience enhanced satisfaction when retail ambiance is congruent with
the arousing qualities (Mattila and Wirtz, 2004). Motivational forces are commonly
accepted to have a key influencing role in the explanation of shopping behavior
(Wallendorf and Brucks, 1993). 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). It has been observed in some
studies that consumers who intend to shop in short notice, generally lean towards
impulsive or compulsive buying behavior driven by arousal effect in the retail stores. Gender, age, leaning towards unplanned purchases, and tendency to buy products not on shopping lists, serve to predict compulsive tendencies (Shoham and Brencic, 2003).

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). 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). Hence,

**H3 (a):** Ambiance of shopping malls and in-store arousal influences buying decisions of the urban shoppers

The ambiance of retail stores whether pleasant or unpleasant moderates the arousal effect on satisfaction and in-store buying behaviors. Satisfaction in pleasant retail ambiance where music, hands-on experience services, playing areas and recreation are integrated, maximizes the consumer arousal. Thus, retailers need to pay attention not only to the pleasantness of the store environment, but also to arousal level expectations of young consumers (Wirtz *et al*., 2007). Lack of appropriate external and internal ambiance of retail stores is a major source of dissatisfaction among young consumers while making pre-purchase decisions. This creates negative emotions in terms of merchandise choice, visual merchandising, store environment, sales personnel attitude, product demonstration policies and promotional activities. These factors are the very foundations of consumer satisfaction and the evidence of consumer dissatisfaction resulting in avoidance behavior should be particularly worrying for retailers, given that they are operating in an
increasingly competitive and saturated fashion environment (Otieno et al, 2005). Thus, the hypothesis may be framed as:

**H3 (b):** The higher the attraction in the retail store, the higher the satisfaction of urban shoppers and lower the perceived conflicts in decision process.

### Study Design

#### Sampling

This study has been conducted in 6 shopping malls comprising 342 assorted stores located on three principal streets- Miramontes, Periferico and Insurgentes in south of Mexico City. Shopping malls located on the above three streets have been purposively selected as these streets branch in various residential settlements. 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 similarity in shopping behavior in reference to propensity of shopping, location preference, product search behavior, information pooling from retailing channels, sensitivity to price and promotions, marketplace ambiance, recreational facilities, point of sales arousal, and store loyalty. Data was collected administering pre-coded structured questionnaires to 600 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

Data for this paper has been extracted from a larger study conducted by the author (Rajagopal, 2008b) during 2005-08 in three different festival seasons broadly categorized as 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 data collection for the principal study and relevant variables were chosen for analysis of this sub-study. Accordingly, 52 variables, which were closely related to influencing the physical preferences of shoppers towards logistics and marketplace attractions, multi-channel retailing factors, and shopping arousal and merriment related variable pertaining to ambiance of marketplace, were selected and incorporated in the questionnaires. The questionnaires were pilot tested to 82 (13.66 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 physical preferences, multi-channel retailing methods and marketplace ambiance related variables as exhibited in Table 1.

//Table 1 about here//

A questionnaire was developed to investigate the extent to which the selected variables for study have influenced the shoppers. 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. 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 600 respondents. However, during the process of data analysis, questionnaires of 58 respondents were omitted due to paucity of information. In all 542 respondents were covered under the study and the usable response rate was 90.33 percent. The non-response bias has been measured applying two statistical techniques. Firstly, telephonic conversations were made with those respondents who either did not respond to the questions of survey or gave incomplete information of their preference to marketplace, store brands, lifestyle perceptions and logistics related issues (Gounaris et al, 2007). It was found that the main reason for the lack of response showing 46.55 percent respondents of the non-response cases was low confidence level of participation while 31.03 percent subjects failed respond all questions of the survey due to paucity of time and 22.42 percent subjects depended on their accompanying persons to offer responses who could not do so. The customer response is considered as unit of analysis of this study.

Secondly, 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 ($\alpha = 0.05$)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.

Data was put through the Chow tests to check the possibility of pooling the data collected from 6 shopping malls located in different demographic settings (e.g. He et al, 2009; Gatignon, 2003) Chow tests were conducted in reference to comparing pooled
unrestricted model with the pooled restricted model, and secondly comparing each category-level model with the pooled restricted model. In the case of data from 6 shopping malls located in different demographic settings, comparison of pooled unrestricted model with the pooled restricted model suggested that the data could be pooled \( (F_{0.05,38,271}) \) statistic=1.83, less than the critical value of 0.96]. However, comparison of inter-mall models with the pooled restricted model showed that shopping attractions influencing shoppers’ behavior showed different intercept though similar slope coefficients pooled \( (F_{0.05,42,271}) \) statistic=1.46, less than the critical value of 1.04]. Thus, to account for these potentially different intercepts dummy variables on multi-channel retailing were used in the analysis.

Construct of Measures and Data Validation

The constructs of the study were measured using reflective indicators showing effects on the core variables. Physical preferences (VS\(_1\) and VS\(_2\)) including logistics and marketplace attractions of shopping malls were measured with 21-variables (logistics related - VS\(_1\)-10 and marketplace attraction related VS\(_2\) -11) on a self-appraisal perceptual scale derived originally on the basis of focus group analysis as referred in the pretext. 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 ambiance, stores assortment and shoppers’ preferences including long-term business horizon and shoppers’ value (e.g. Rajagopal 2009a; Ruekert 1992; Hunt and Morgan 1995).

Constructs related to Multi-channel retailing (VS\(_3\), VS\(_4\) and VS\(_5\)) were measured using 22-variable ‘self-appraisal perceptual scale’ comprising shopping preferences of customers, customer relationship effects and shopper’s perceptions. Product and sales differentiation (VS\(_3\)) were measured using five factors including new product/new sales strategy introduction, high value product/sales services, building brand image/customer
loyalty, product quality/sales price, and high product use value/customer relations (adapted from Kim and Lee 2008; Jindal et al 2003; Homberge et al 1999). Other variables were selected on the basis of focus group discussion. Construct of arousal and merriment (VS₆) was measured in reference to 9-variable ‘self-appraisal perceptual scale’ consisting of hands-on experience, sensory appeals, samples and gifts, creative styles, product display, customer interaction, ethnicity, in-store advertising and newness of the product (e.g. Rajagopal, 2008c).

All reflective constructs for all variable segments of the study were analyzed through the factor analysis model as a single confirmatory test. The goodness-of-fit statistics¹ comprising chi-square statistics (1.63), root mean square error of approximation (0.086), Tucker-Lewis fit index (0.931), comparative fit index (0.922) and incremental fit index (0.938) indicate that the model used for analysis in the study fits the data adequately. All variables were loaded significantly on their corresponding segments which revealed significant p-value at 0.01 to 0.05 levels.

The questionnaires were initially drafted in English and later translated in Spanish for use in Mexico. The questionnaires were translated from English to Spanish using the literal translation and transposition techniques. In translating some questions the technique of equivalence or reformulation had been used to give a correct sense to the sentence. While translating the questions, bilingual advisors help from an agency providing multi-lingual translation services was taken to ensure correctness of the meanings of complex words and accuracy in the transcription of qualitative data. Later the responses collected on the structured question were coded for analysis purpose. The data collected from respondents was tested for its reliability applying the Cronbach Alfa test. Variables derived from test instruments are declared to be reliable only when they provide stable and reliable responses over a repeated administration of the test. The test results showed acceptable

¹ The goodness-of-fit statistics that the Tucker-Lewis index (TLI) also known as the Bentler-Bonett non-normed fit index (NNFI), comparative fit index (CFI) and incremental fit index (IFI) tend to range between 0 and 1, with values close to 1 indicating a good fit. The TLI (NNFI) has the advantage of reflecting the model fit very well for all sample sizes. It is observed in past empirical studies these indices need to have values above 0.9 before the corresponding model can even be considered moderately adequate.
reliability level \((\alpha = 0.741)\) on an average for all observations included for analysis in reference to all variables pooled under different segments. Descriptive statistics and correlation of selected variables are exhibited in Table 2.

//Table 2 about here//

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).

**Model Specification**

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; Rajagopal 2007). Let us assume that the shopping attractiveness is \(S_x\) and shopping ambiance in malls is \(M_{ij}^{(i_1+i_2+i_3+...+i_n)}\) 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 ambiance of shopping malls \(A_{am}\) and assortment of brand retail stores \(R_{hs}\) in a commercial place.
\[ S_x = \sum_{i}^{j} \left[ M_{i} t_{i1} t_{i2} ... t_{in} \right] B_{sp}^{i} A_{am}^{i} R_{bs} \]  

(1)

Hence

\[ S_x = M_{p}^{jh} \frac{\partial q}{\partial t} = M_{p}^{jh} \frac{\partial b'}{\partial k} \frac{\partial k}{\partial t} = M_{p}^{inh} \frac{\partial q}{\partial k} B_{sp}^{i} A_{am}^{i} R_{bs} \]  

(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 \( (\partial_i/\partial_k > 0) \) 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, enhances 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 \[ b' \frac{\partial b'}{\partial k} = B_{sp} + A_{am} + R_{bs} + V_b \]  

(3)

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

Impact of various shopping attractions as determinants of shopping behavior of urban consumers is analyzed fitting the general log linear regression model to postulate a linear relationship between the independent variables and the logarithm of the dependent variable. The dependent variable in this study is the shopping behavior with distinctly positive value. The natural logarithmic values of independent and dependent variables were used as transformed variables in the linear regression \( (e.g. \text{ Jindal et al 2003; Wooldridge, 2002}) \). The general model of log linear regression was later used for specific variable segments such as physical preferences \( (VS_1 \text{ and } VS_2) \), multi-channel retailing.
(VS₃, VS₄ and VS₅), and shopping ambiance (VS₆). The general log linear model is explained as:

\[ S_{bc} = \beta_0 + \beta_1LAM + \beta_2MKTATT + \beta_3MKTATT + \beta_4CRM + \beta_5SHOPREF + \beta_6AMMT + \gamma_1DST + \gamma_2PROXIM + \gamma_3TYSHOP + \gamma_4SERCOST + \gamma_5PRODIFF + \gamma_6CSERVE + \gamma_7SHOPINCEN + \gamma_8STORPAT + \gamma_9HEX + \varepsilon \]  

(4)

Where variables associated with the \((\beta)\) coefficient denote principal independent (uncontrolled) variables while variables referring to \((\gamma)\)coefficient indicate controlled variables. The abbreviations of the variables are explained as below:

- LAM = logistics and amenities,
- MKTATT = Market attractions,
- CRM = Customer relationship management,
- SHOPREF = Shoppers’ preference,
- AMMT = Arousal and merriment,
- DST = Distance,
- PROXIM = Proximity,
- TYSHOP = Assortment of shops,
- SERCOST = product search cost,
- PRODIFF = Product differentiation,
- CSERVE = Customer services,
- SHOPINCEN = Shopping incentives,
- STOREPAT = Store patronage,
- HEX = Hands-on-experience,
- \(\varepsilon\) is an error term.

As shopping behavior of urban consumers \((S_{bc})\) is a function of variable segments physical preferences \((S_{bpp})\), multi-channel retailing \((S_{bmcn})\) and shopping ambiance \((S_{bamb})\), the log linear regressions were computed for each variable segment as below:

\[ S_{bpp} = \beta_0 + \beta_1V_1 + \beta_2V_2 + \beta_3V_3 + \beta_4V_4 + \beta_5V_5 + \beta_6V_6 + \gamma_1CV_1 + \gamma_2CV_2 + \gamma_3CV_3 + \varepsilon \]  

(5)

In this equation \(V_{1…6}\) and \(CV_{1…3}\) are illustrated in Table 3. Similarly,

\[ S_{bmcn} = \beta_0 + \beta_1V_1 + \beta_2V_2 + \beta_3V_3 + \beta_4V_4 + \beta_5V_5 + \beta_6V_6 + \beta_7V_7 + \beta_8V_8 + \beta_9V_9 + \beta_{10}V_{10} + \beta_{11}V_{11} + \gamma_1CV_1 + \gamma_2CV_2 + \gamma_3CV_3 + \gamma_4CV_4 + \gamma_5CV_5 + \varepsilon \]  

(6)

In the above equation \(V_{1…11}\) and \(CV_{1…5}\) are illustrated in Table 5. Likewise,

\[ S_{bpp} = \beta_0 + \beta_1V_1 + \beta_2V_2 + \beta_3V_3 + \beta_4V_4 + \beta_5V_5 + \beta_6V_6 + \gamma_1CV_1 + \varepsilon \]  

(7)

Wherein, \(V_{1…6}\) and \(CV_1\) are illustrated in Table 6.
The model explains that the shopping attractions in shopping malls stimulate the shopping behavior and enhance satisfaction of consumers in reference to cognitive pleasure, value for money, reliability, safety, and comfort. The above structural equations explain that shopping convenience and satisfaction determines the choice of retailing channels. The model implies that, even if these intangible determinants are not measured, they will represent a component of the regression model’s residual terms, which will predict shopping behavior of urban consumers (Ward, 2001).

**Results and Discussion**

The regression results have shown strong evidence towards the shopping orientation of urban consumers in reference to logistics and amenities in the shopping malls, multi-channel retailing routes to their shopping and ambiance in the shopping malls. The results are discussed categorically indicating the hypotheses tests.

//Table 3 about here//

It may be seen from the results exhibited in Table 3 that accessibility including logistics and location of marketplace ($\beta = 0.275, p < 0.05$) and distance covered by the customers to visit the malls, which determines proximity ($\beta = 0.313, p < 0.05$) from the residential location significantly influence the shopping behavior. The inter-mall proximity ($\beta = 0.294, p < 0.05$) is also found to be one of the factors that drive shopping behavior of customers to optimize their efforts on product search and customer satisfaction. However, number and type of shops in the mall are also observed among influencing factors of shopping behavior among urban shoppers. Mall administration discretely plays role in stimulating shoppers towards visit to mall by providing recreational events, paramedical aid, and hygienically maintaining the public conveniences. Accordingly, the results are consistent with hypothesis H1 (a).
Lifestyle appeal of the stores ($\beta = 0.392, p < 0.01$) in the mall which intuited the sense of status in the shopper is found to be one of the prominent variables that reflected in the shopping behavior. The marketplace attractions are basically observed by the shoppers as recreational facilities ($\beta = 0.422, p < 0.01$) in the shopping malls and results indicate that this variable contributes significantly in choosing shopping locations in urban settings.

Three control variables including distance covered ($CV_1$), proximity to other malls ($CV_2$) and types of shops in mall ($CV_3$) capture significant variation among the determinants of shopping behavior except $CV_3$. The estimations represent for all the observations of the study and standard error has been calculated accordingly. The results also 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 alternate shopping locations within the reasonable distance. Hence, the results exhibited in Table 3 support the hypothesis H1 (b).

Results of the study divulge that multi-channel retailing has encouraged urban shoppers to exercise more options of shopping and meticulously decide the routes to shopping. Multi-channel retailing has not only provided convenience to the customers but has also widened the buying options through sales differentiation ($\beta = 0.406, p < 0.01$) strategy and low price ($\beta = 0.377, p < 0.01$) offers. It may be seen from the Table 4 that sales differentiation strategy and low price choices of products and services significantly stimulate the buying behavior of urban shoppers. Sales differentiation is observed by the shoppers in reference to pre- and post-sales services offered by the retailers viz. consultation on the fashion apparel during pre-sales and customization of products after the sale. It is observed during the study that the contemporary after-sales market is of increasing importance to the retailing firms. One of the features required by the retailing firms is to provide differentiated service levels to different groups of customers (e.g. Kranenburg and van Houtum, 2008). Shoppers are also attracted to the retailers when low prices are offered. In view of the above results it can be stated that hypotheses H2 (a) is conformed.

//Table 4 about here//
However, it is observed during the study that customer beliefs are stronger in urban markets towards the shopping advantages in terms of price, brand, quality, product differentiation and shopping incentives. Thus, urban shoppers meticulously search for the products over the retailing channels and across shopping malls. Promotion and quality customers and mall oriented shoppers were more satisfied with store-based retail channels towards purchase of apparel, fashion accessories, cosmetics, home interior products, electronics and innovative products whereas price cognizant shoppers surveyed over other channels including alternate store catalogues and internet channels before making buying decision.

The results exhibited in Table 4 reveal that three variables including price advantages ($\beta = 0.377, p < 0.01$), quality perceptions ($\beta = 0.342, p < 0.01$) and shopping incentives ($\beta = 0.30, p < 0.05$) appeared as strong determinants of shopping behavior which induced comprehensive search ($\beta = 0.294, p < 0.05$) for the products across channels over long time though the product search cost was less dominant factor among the respondents. It is also evident from the results that better customer services ($\beta = 0.494, p < 0.01$) combined with sustainable store patronage ($\beta = 0.163, p < 0.10$) develops higher confidence among shoppers to stay long with the retailing firms. Store patronage can be explained as strategies of smoothening customer relations by retailing firms through offering additional benefits to the shoppers to stand loyal to the store. These strategies include comprehending customers with global product information, offering free consultation (e.g. interior design stores offer consultation on improving room ambiance using fabrics), cross promotions and loyalty cards. Two control variables of product customization ($CV_1$) and guarantee on buying ($CV_2$) capture significant variation among the variables explaining multi-channel retailing that influences the shopping behavior of customers. These results are consistent with hypothesis H2 (b) and H2 (c).

It is observed during the study that customer intending to go out for shopping in malls expect company-wide initiatives to ensure that all employees turn customer oriented to resolve the product or purchase related conflicts and show customer friendly attitude instead of just those on the front-line. Accuracy of information is not deeply embedded in
Mexican retailing environment which often risks the customers’ trust and discourages building loyalty towards the retailing firms (e.g. Rajagopal and, 2006). It is observed during the study that customer beliefs \( (\beta = 0.194, p < 0.10) \) were formed of perceptions, image, reputation of the firm and trust (PIRT) while shopping. The stronger these constituents higher are the marketplace loyalty \( (\beta = 0.548, p < 0.01) \) among the shoppers (Rajagopal, 2009b). Thus retailing firms should understand that customer beliefs have higher impact on marketplace loyalty of shoppers. Accordingly, the above results support the hypothesis H2 (d).

The recreational facilities prompt shopping arousal and play a pivotal role to deliver a divulging impact on urban shoppers. Shopping supported with recreational attractions may be identified as one of the major drivers in promoting urban retailing by demonstrating the quality fashion products and store preferences among urban shoppers. Arousal in shopping makes customers stay longer in the shopping malls, interact in retail stores, experience the satisfaction and make buying decisions. Perceptions of shopping duration, emotional levels, and merchandise evaluations are derived from the level of arousal experienced by the shoppers in the retail stores (Rajagopal, 2007).

The results of the study show that in-store arousal among shoppers is driven by frequent offers of new product samples and gifts \( (\beta = 0.248, p < 0.05) \) on value of purchases made along with attractive interactive advertising \( (\beta = 0.235, p < 0.05) \) hosted by the outsourced sales promoters in the retail stores and shopping mall. In addition creative sales practices \( (\beta = 0.172, p < 0.10) \) like computer simulation in selecting fashion apparel and strong referrals \( (\beta = 0.181, p < 0.10) \) on products and services stimulate the buying process of customers. Creative sales are followed by selected stores in a limited way and referrals are also occasionally arranged inviting celebrities of popular soaps in local television channels. These factors have relatively low influence on the shoppers as compared to
direct promotions. These results support hypothesis H3 (a) which states that ambiance of shopping malls and in-store arousal influence buying decision of urban shoppers.

In addition to the variables presented in Table 5 that build arousal among the urban shopper, the retailing attractions also consist of product display ($\beta = 0.207, p < 0.10$) plan of the retail stores and sensory appeals in the stores such as music, video, aroma, lighting, and walking space between the stacks. Attractive product display in stores includes wall fixtures with matching floor fixtures such as gondolas, racks, and nesting tables, aisle display, aisle head presentations, fixture line, polarity display arrangements for categorically distinct products and realistic dummy displays. It is observed that the better the store display, the higher the attraction of retail store. Higher attraction of retail stores with ergonomic display of products leads to lower conflicts in making buying decision ($\beta = 0.246, p < 0.05$) by the shoppers which also saves time on consulting product section supervisors to seek clarifications. Accordingly, it can be stated that the results exhibited in Table 5 are consistent with hypothesis H3 (b).

Overall analysis of the results reveals that shoppers in urban areas are concerned with the logistics, accessibility, ergonomics and ambiance of shopping malls towards developing their shopping behavior. Results show that low price, better quality and availability of variety of routes to shopping also influence the shoppers’ behavior in urban markets. Hence, shopping malls and large retailers located in the malls should strive to achieve operating efficiencies by making malls attractive, lower prices and opening multichannel retailing options to the customers. Such strategies would enable retailing firms to sustain increasing competition, and gain a larger market share.

Managerial Implications

Shopping mall are dynamic business centers that 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. Managers of shopping malls and retailing firms should understand customer reaction to economic and relations factors determining their perceptions and attitude towards shopping in an urban retail setting. Shopping motivation is one of the key constructs of research on shopping behavior and exhibits a high relevance for formulating retail marketing strategies. Managers of retailing firms need to orient customers towards social, experiential, and utilitarian aspects of shopping which could motivate shoppers on pleasant, frictionless, value based, and quality led shopping. Retailing philosophy in urban markets should be transformed from quantity driven to quality led concepts.

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. If a retailing firm chooses to compete on price then complex pricing actions, cutting prices in certain channels, or introducing new products or flanking brands strategies may be used, enabling the firm to 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. A competitively potential way to assist consumers in making dynamic shopping decisions is to disclose price information to them before they shop, for example by posting prices on the multiple retail channels like catalogues, web sites and e-bays. Multi-channel retailing outlets including catalogue and virtual outlets on Internet offer quick product search, comparative data of product, price, promotion, availability and additional services to shoppers and build shopping motivation. Managers can take advantage of the positive linkage between web site design features and product search behavior by tracking the online consumers' expectation. Accordingly, customers may be prospected to buy products either on line or physically at the store. Managers of retailing firms should consider effective displays, easily identifiable packaging, and focusing in-store advertising media on the point of purchase to attract potential shoppers and prevent existing customers from switching to alternate shopping outlets. Marketers
can also address the various interests of manufacturing companies, distributors, and target consumers.

Ambiance of the marketplace and retailing outlet significantly affects the behavior of urban shoppers. Ambiance of shopping mall includes recreational, leisure and refreshment places that offer customers a relaxing environment. Recreational shopping needs to be recognized as a multifaceted activity that may be performed in various ways and embody different types of consumer meanings. Managers of retailing firms need to focus on building influence of retail environments on individuals engaged in recreational shopping (Kristina, 2006). Managers of retailing firms must understand that shopping behavior among customers is governed by various platforms such as credit incentives, referrals, and shopping motivations. 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 factors such as 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 (Rajagopal, 2008d).

**Conclusion**

This study discusses the behavior of urban shoppers in reference to preferences for shopping malls, stores assortment, convenience, distance to malls, economic advantage, and leisure facilities. Household leisure and shopping behavior is largely motivated by the physical factors like shop location decisions, travel behavior, and type of retail stores in a shopping mall. The study reveals that the behavior of urban shopper is guided by the logistics, accessibility, and location of the shopping mall, demographic surroundings and agglomeration of shops in the commercial area. The perspectives of shopping mall ambiance 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.

It is observed in this study that shoppers' perceptions of the retail environment, purchase motivations, and product quality mediate the emotions and shopping behavior. Shoppers in urban areas typically patronage multi-channel retail outlets and invest time and cost towards an advantageous product search. The study suggests that urban shoppers are motivated to seek benefits of the store and mall specific promotions and prices enhancing their shopping basket. The majority of shoppers rely on store patronage and building loyalty over time to continue benefits of the store promotions. The shopping motivation, attributes of retailers and customer beliefs influence patronage behavior among shoppers. The discussions in the study also 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 recreational facilities, location of the mall, ambiance and store attractiveness in reference to products and services, brand value, and price.

**Limitations of the Study**

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. The findings are limited to Mexican consumers and convenience sampling. Other limitations include the qualitative variables used in the study which might have reflected on making some causal statements. However, future studies could avoid these limitations by using data from several countries, representative samples, and additional variables.
Future Research Prospects

The core idea of this study to examine the factors influencing shopping behavior of urban consumers, shopping mall ambiance and variety of routes to shopping used by the customers. This study reviews the previous contributions on the subject and raises some interesting research questions in reference to the effectiveness of shopping mall administration, management of multi-channel retailing, role of product and sales differentiation strategy. There are not many empirical studies that have addressed these questions either in isolation or considering the interrelationship of the above factors. The determinants of shopping behavior analyzed in this study can be further explored broadly with the lifestyle center management and consumer behavior research streams.

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<table>
<thead>
<tr>
<th>Variables by Category</th>
<th>Physical Preferences</th>
<th>Multi-channel Retailing</th>
<th>Ambiance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Analytical Segments</strong></td>
<td>Logistics &amp; Amenities VS₁ (10)</td>
<td>Marketplace attractions VS₁ (11)</td>
<td>Shopping preferences VS₁ (9)</td>
</tr>
<tr>
<td><strong>Hypotheses setting</strong></td>
<td>H₁ (a)</td>
<td>H₁ (b)</td>
<td>H₂ (a) and H₂ (b)</td>
</tr>
<tr>
<td><strong>Description of variables selected for data collection</strong></td>
<td>Location of marketplace</td>
<td>Type of shops</td>
<td>Product search time</td>
</tr>
<tr>
<td></td>
<td>Demographic surroundings</td>
<td>Children’s corner</td>
<td>Product search cost</td>
</tr>
<tr>
<td></td>
<td>Accessibility to marketplace</td>
<td>Game parlor</td>
<td>Number of retail channels</td>
</tr>
<tr>
<td></td>
<td>Distance covered</td>
<td>Food zone</td>
<td>Product differentiation</td>
</tr>
<tr>
<td></td>
<td>Floor area of shops</td>
<td>Recreational events</td>
<td>Sales differentiation</td>
</tr>
<tr>
<td></td>
<td>Car parking</td>
<td>Music and concerts</td>
<td>Range of choice</td>
</tr>
<tr>
<td></td>
<td>Proximity of alternate malls</td>
<td>Lighting arrangement</td>
<td>Price advantages</td>
</tr>
<tr>
<td></td>
<td>Security standards</td>
<td>Relaxing places</td>
<td>Quality factors</td>
</tr>
<tr>
<td></td>
<td>Information booth</td>
<td>Life style appeal</td>
<td>Customer services</td>
</tr>
<tr>
<td></td>
<td>Evacuation path</td>
<td>Fashion products</td>
<td></td>
</tr>
</tbody>
</table>

VS=Variable Segment. Figures in parentheses indicate number of variables.
Table 2: Descriptive Statistics and Correlations for the Selected Variables for the Study

<table>
<thead>
<tr>
<th>Variable Segments</th>
<th>Logistics &amp; Amenities VS₁ (10)</th>
<th>Marketplace Attractions VS₂ (11)</th>
<th>Shopping Preferences VS₃ (9)</th>
<th>Customer Relationship VS₄ (6)</th>
<th>Shoppers’ Perception VS₅ (7)</th>
<th>Arousal and Merriment VS₆ (9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data reliability test-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cronbach (α) scores</td>
<td>0.84</td>
<td>0.76</td>
<td>0.88</td>
<td>0.82</td>
<td>0.74</td>
<td>0.82</td>
</tr>
<tr>
<td>Sample Variance</td>
<td>0.531</td>
<td>0.365</td>
<td>0.395</td>
<td>0.477</td>
<td>0.201</td>
<td>0.337</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.326</td>
<td>-0.124</td>
<td>-0.239</td>
<td>-0.570</td>
<td>-0.424</td>
<td>-0.359</td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.022</td>
<td>0.043</td>
<td>0.081</td>
<td>0.096</td>
<td>0.168</td>
<td>0.768</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>2.225</td>
<td>8.329</td>
<td>1.643</td>
<td>1.829</td>
<td>6.916</td>
<td>4.716</td>
</tr>
<tr>
<td>Sample Size</td>
<td>542</td>
<td>542</td>
<td>542</td>
<td>542</td>
<td>542</td>
<td>542</td>
</tr>
</tbody>
</table>

VS=Variable Segment. Figures in parentheses indicate number of variables
* Significant (0.01) level and ** significant (0.05) level

Table 3 Determinants of shopping behavior: Physical Preferences (Sbpp)
(Log linear regression results)

<table>
<thead>
<tr>
<th>Var. No.</th>
<th>Independent Variables</th>
<th>Control Variables</th>
<th>Dummy Variables</th>
<th>Coefficient</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>V₁</td>
<td>Location of marketplace</td>
<td></td>
<td></td>
<td>0.275**</td>
<td>0.045</td>
</tr>
<tr>
<td>V₂</td>
<td>Accessibility</td>
<td></td>
<td></td>
<td>0.361</td>
<td>0.162</td>
</tr>
<tr>
<td>V₃</td>
<td>Floor area of shops</td>
<td></td>
<td></td>
<td>0.142</td>
<td>0.074</td>
</tr>
<tr>
<td>V₄</td>
<td>No. of shops in the mall</td>
<td></td>
<td></td>
<td>0.318*</td>
<td>0.033</td>
</tr>
<tr>
<td>V₅</td>
<td>Recreational facilities</td>
<td></td>
<td></td>
<td>0.422</td>
<td>0.271</td>
</tr>
<tr>
<td>V₆</td>
<td>Lifestyle appeal of stores</td>
<td></td>
<td></td>
<td>0.392</td>
<td>0.186</td>
</tr>
<tr>
<td>CV₁</td>
<td>Distance covered</td>
<td></td>
<td></td>
<td>0.313**</td>
<td>0.077</td>
</tr>
<tr>
<td>CV₂</td>
<td>Proximity to other malls</td>
<td></td>
<td></td>
<td>0.294*</td>
<td>0.103</td>
</tr>
<tr>
<td>CV₃</td>
<td>Types of shops in mall</td>
<td></td>
<td></td>
<td>0.385</td>
<td>0.038</td>
</tr>
<tr>
<td>DV₁</td>
<td>Mall administration</td>
<td></td>
<td></td>
<td>0.266</td>
<td>0.074</td>
</tr>
</tbody>
</table>

R² = 0.361**
Adjusted R² = 0.214
Intercept = 0.664**
*p < 0.01, **p <0.05, +p <0.10, SE= Standard Error
All significance levels are based on two-tailed tests. F₁₀,521 = 4.82

n=542
### Table 4 Determinants of shopping behavior: Multi-channel Retailing ($S_{mcr}$)
(Log linear regression results)

<table>
<thead>
<tr>
<th>Var. No.</th>
<th>Independent Variables</th>
<th>Control Variables</th>
<th>Dummy Variables</th>
<th>Coefficient</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>V₁</td>
<td>Product search cost</td>
<td></td>
<td></td>
<td>0.125</td>
<td>0.014</td>
</tr>
<tr>
<td>V₂</td>
<td>No. of retail channels</td>
<td></td>
<td></td>
<td>0.283**</td>
<td>0.032</td>
</tr>
<tr>
<td>V₃</td>
<td>Sales differentiation</td>
<td></td>
<td></td>
<td>0.406*</td>
<td>0.292</td>
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<tr>
<td>V₄</td>
<td>Price advantage</td>
<td></td>
<td></td>
<td>0.377*</td>
<td>0.166</td>
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<tr>
<td>V₅</td>
<td>Quality perception</td>
<td></td>
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<td>0.169</td>
</tr>
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<tr>
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$R^2 = 0.318^{**}$  
Adjusted $R^2 = 0.164$  
Intercept = 0.474**

* $p < 0.01$, ** $p < 0.05$, + $p < 0.10$  
SE = Standard Error  
All significance levels are based on two-tailed tests.  
$F_{(18,538)} = 6.14$

### Table 5 Determinants of shopping behavior: Marketplace ambiance ($S_{hamb}$)
(Log linear regression results)

<table>
<thead>
<tr>
<th>Var. No.</th>
<th>Independent Variable</th>
<th>Control Variable</th>
<th>Coefficient</th>
<th>SE</th>
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<tbody>
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<td>Creative sales practices</td>
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<td>V₂</td>
<td>Product display</td>
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<td>V₃</td>
<td>Interactive advertising</td>
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<td>V₄</td>
<td>Referrals</td>
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<td>V₅</td>
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<td>V₆</td>
<td>Samples and gifts</td>
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<td>1.293</td>
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</table>

$R^2 = 0.219^{*}$  
Adjusted $R^2 = 0.218$  
Intercept = 0.257**

* $p < 0.01$, ** $p < 0.05$, + $p < 0.10$  
SE = Standard Error  
All significance levels are based on two-tailed tests.  
$F_{(8,492)} = 4.07$