



# Buying decisions towards organic products: an analysis of customer value and brand drivers

Rajagopal

*Business Division, Department of Marketing,  
Monterrey Institute of Technology and Higher Education, ITESM, Mexico*

## Abstract

**Purpose** – Many multinational companies have entered the market of organic cosmetics and toiletries (OCT) in the global marketplace. This study attempts to analyze the impact of economic and relational variables on customer and brand values in reference to OCT products in Mexico through empirical investigation in selected department stores that attract high profile customers. The study proposes a framework for future research in measuring the customer value in specific reference to the non-conventional products.

**Design/methodology/approach** – This study is based on the primary data using the information of 369 respondents, who were involved in shopping at chosen retail self-service stores in Mexico City, administering a semi-structured questionnaire. The study was conducted in 11 retail self-service stores in Mexico City including four departmental stores spread over three locations in Mexico. The data has been fit to the model developed for the study using linear equations. One of the prominent features emerged during the study is that customer perception is largely governed by marketing communications.

**Findings** – The study reveals that strategic product positioning and effective retailing augment the customer perceptions and help building the long-run customer values towards the non-conventional products owning unfamiliar brands. Results of empirical data have also shown that advertising and promotional strategies of the OCT brands helped customers review their preferences against the synthetic cosmetics and toiletries which appreciated the brand value for the OCT products of the companies in Mexican market.

**Research limitations/implications** – Like many other empirical studies this research might also have some limitations in reference to sampling, data collection and generalization of the findings. Samples drawn for the study may not be enough to generalize the study results. Open ended questions were answered by the Mexican respondents in Spanish and sometimes transcription of the audio might have overlooked some issues. However, to ensure that the data cover a wider spatial and temporal dimensions in the study region, data should be cleansed and filtered with many variability factors affecting the consumer behavior and retailer performance.

**Originality/value** – Marketing of organic cosmetics encouraged by the growing environmental consciousness among the customers, is a recent phenomenon in the business. However, there is paucity of literature on this subject particularly in reference to Latin America. Hence, this paper attempts to contribute to the existing studies.

**Keywords** Mexico, Product positioning, Toiletries, Consumer behaviour

**Paper type** Research paper

Use of organic cosmetics and toiletries (OCT) manufactured from herbs and plant extracts has been popular in many developed countries. The organic constituents in the

The author sincerely acknowledges the support provided by Ananya Rajagopal, Graduate student of Industrial and Systems Engineering of ITESM, Mexico City Campus in computing the data and developing tables in this paper.



---

cosmetics categorically place them as ecological products and the process of marketing such products may be explained as green marketing. Marketing organic cosmetics is relatively recent outgrowth in the business and it is largely being encouraged by the growing environmental consciousness on the part of citizens. A growing market for cosmetics and toiletries, several global and local companies have entered developing countries like Mexico. International companies like The Body Shop, and General Nutrition Centre (GNC) have employed green marketing strategies to build their customer base in the Mexican market.

In response to customer demand for products with natural origins and anti-aging functions, some of the multinational firms in Asia have developed herbal medicinal cosmetic after years of scientific research on capturing the pharmacological essence of the ingredients used in traditional medicine (Hwang, 2004). However, it has been observed that the organic cosmetics are yet not familiar brands in the Mexican market. An increase in customer value may be attributed mainly to an increase in the perceived values of brands in the market, while the price effect measures value change caused by adding unfamiliar brands like GNC in OCT products to the existing brands. The customer value seemed to decrease as the prices of the familiar brands increased in a large proportion and the price increase was most pronounced among the users of OCT products.

This study focuses on measuring the impact of economic and relational variables on building customer and brand values in Mexico through empirical investigation in selected departmental stores that attract high profile customers. The study discusses the extent of influence of various factors affecting the brand value and customer behavior towards innovative products and unfamiliar brands of the firms in a given market. The value effects of OCT products in selected departmental stores which attract high profile customers have also been discussed in the study.

## Review of literature

### *Consumption of organic products*

In the markets of developed countries like USA and Europe, organic products related to diet, cosmetics and general health medicines are tightly regulated and mandatory labeling laws are imposed. Although regulations are strictly adhered to, customer groups have pushed for comprehensive information on the process and nutritional values of such organic products. There have been many research studies providing empirical estimates of customer demand for synthetic cosmetics (Noussair *et al.*, 2004; Lusk *et al.*, 2005). Some other studies have offered theoretical models to explain the value effects of biotechnology (Giannakas and Fulton, 2002). The value effects of biotechnology on various customer products have been investigated by few macro level studies, which discuss the customer preferences and value parameters in reference to genetically modified food (Nielsen *et al.*, 2003). There has been little awareness among the elite customers in Latin American markets about the harmful effects of synthetic cosmetics on prolonged usage. It has been observed that such customer knowledge has generated willingness to buy OCT products with a price advantage and other benefits, compared with organic and ordinary types of foods, employing a robust experimental method. The customer preference to the organic cosmetics has been increasing as customer fears surrounding perceived risk decrease and customer benefits are communicated (Mather *et al.*, 2005).

---

An individual's choice of organic products can be linked clearly to ethical stances, but ethical choices can also vary from individual to individual, from industry to industry and among countries. Consumer purchasing motivations are revealed in a study as being self-interest-centered rather than altruistic. Hence, to enhance scope of organic products marketing in future firms must aim to modify perceptions and attitudes of larger consumer segments by implementing educational marketing campaigns that reinforce the ethical, environmental and societal benefits of organic production (McEachern and McClean, 2002). The key challenge for organic products marketers is to strengthen individuals' perception of the individual benefits by adding more and stronger emotional values to green brands. Future green marketing research should extend its analysis to the emotional motivations and benefits associated with environmentally responsible consumption behavior (Hartmann and Apaolaza, 2006).

The green intentions of organic products significantly influence ethnocentrism, environmental concern, involvement and attitudes. However, risk aversion has been found as major emerging variable while involvement and environmental concern are significant in the determining the consumer behavior towards organic products (Paladino, 2005). Concerns related to the environment are evident in the increasingly ecologically conscious marketplace. It has been observed in one of the research studies that females, married and with at least one child living at home are the consumers who are willing to pay more for environmentally friendly products. They place a high importance on security and warm relationships with others, and they often consider ecological issues when making a purchase (Laroche *et al.*, 2001).

### **Customer value measurement**

Consumption has often been dichotomized in terms of its functional-hedonic nature and is closely associated with the level of satisfaction leading to determine the customer value influence (Wakefield and Inman, 2003). As the new products are introduced, a firm may routinely pass these costs on to consumers resulting into high prices. However, a less obvious strategy in a competitive situation may be to maintain price, in order to drive the new product in the market with more emphasis on quality, brand name, post-sales services and customer relations management as non-price factors. Studies that advocate the models of building customer value through traditional relationship marketing discuss the long-term value concepts to loyal customers. Most importantly, these are expected to raise their spending and association with the products and services of the company with increasing levels of satisfactions that attribute to values of customers (Reichheld and Sasser, 1990).

In the most optimistic settings, such value creation is observed to generate new customers for new products in view of the customer relationship and value management strategies of the firm (Ganesh *et al.*, 2000). In the high customer value framework, the firm ensures diminished costs to serve (Knox, 1998) and exhibits reduced customer price sensitivities. A database-driven approach, customer tenure in reference to the length of a customer's relationship and values retention with a company has often been used to approximate the loyalty construct (Ganesh *et al.*, 2000; Reinartz and Kumar, 2000, 2002). Hence, the relationship marketing with a customer value orientation thrives on the concept that raises the length of the customer-company relationship which contributes in optimizing the profit for the firm (Reichheld and Sasser, 1990). However, the contributions of long-life customers were generally

---

declining and in a non-contractual setting short-life but high-revenue customers accounted for a sizeable amount of profits (Reinartz and Kumar, 2000).

Improving customer value through faster response times for new products is a significant way to gain competitive advantage. In the globalization process many approaches to new product development emerge, which exhibit an internal focus and view the new product development process as terminating with product launch. However, it is process output that really counts, such as customer availability. A study proposes that with shortening product life cycles it should pay to get the product into the market as quickly as possible, and indicates that these markets should be defined on an international basis. The results of the study reveal that greater new product commercial success is significantly associated with a more ambitious and speedier launch into overseas markets as the process of innovation is only complete when potential customers on a world scale are introduced effectively to the new product (Oakley, 1996).

The retail sales performance and the customer value approach are conceptually and methodically analogous. Both concepts calculate the value of a particular decision unit by analytical attributes forecast and the risk-adjusted value parameters. However, virtually no scholarly attention has been devoted to the question if any of these components of the shareholder value could be determined in a more market oriented way using individual customer lifetime values (Rajagopal, 2005). The value of a customer may be defined in reference to a firm as the expected performance measures are based on key assumptions concerning retention rate and profit margin and the customer value also tracks market value of these firms over time. The value of all customers is determined by the acquisition rate and cost of acquiring new customers (Gupta *et al.*, 2004).

Customers' lifetime value is constituted by three components – customer's value over time, length of customers association and the services offered to the customer. Many firms agree that their efforts should be focused on growing the lifetime value of their customers. However, few have come to terms with the implications of that idea for their marketing management with focus on decision making and accountability of customer values (Rust *et al.*, 2004). In manufacturing and marketing firms, customer behavior is rather complex, because customers can purchase more than one service, and these purchases are often not independent from each other (Donkers *et al.*, 2003). However, it has been observed that low perceived use value; comparative advantages over physical attributes and economic gains of the product make significant impact on determining the customer value for the relatively new products.

### Theoretical construct

According to the customer choice model of Giannakas and Fulton (2002), individuals are assumed to consume optimum one unit of the product of their interest within a given time. The construct of the model[1] of customer behavior, assumes that prior to choice of OCT product, customer  $i$  derives perceived use value, for  $t$  non-OCT or synthetic products having  $U_{vi}$  willingness to pay for the non-OCT product on the perceived used value of customer  $i$  at price  $p$ . In order to explain the customer preference to the product and estimating the brand value in reference to this study it may be derived that customer obtains the perceived use value ( $U_{vi} - p^t$ ) from consuming non-OCT product. The customer also exercises his option of buying a high value substitute (OCT products)

at an alternate price  $p^a$  where ( $p^a \geq p^t$ ). Hence, without availability of OCT products, the customer value  $Cs$  may be derives as:

$$Cs_i^t = \lim_{0 \rightarrow \infty} [(U_{vi} - p^t), (U_{vi} - p^a)] = (U_{vi} - p^t) \tag{1}$$

Following the scenario when the customers get access to the OCT products in the market, customers enhance the perceived use value of the OCT product by factor  $E_{vi}$ . This parameter is subjective to the customer decision in view of their preferences towards consuming organic products. However, due to lack of awareness, advertising and sales promotions, many customers may not be able to establish their preferences explicitly towards the synthetic and non-OCT products. If  $\alpha$  represents the market segment for the OCT products, the customers would access the products and perceive its value by ( $\alpha E_{vi}$ ). Accordingly, the customer value after the OCT products are made available in the market segment may be described as:

$$Cs_i^{AP} = \lim_{0 \rightarrow \infty} [(U_{vi} - p^t) - \alpha E_{vi}, (U_{vi} - p^a), B_i^{vg}] \tag{2}$$

Wherein, the expression  $Cs_i^{AP}$  denotes the enhancement of customer value for OCT products in reference to the advertising and promotion strategies of the firms and  $B_i^{vg}$  represents the brand value of OCT products perceived by the customers. Further,  $Cs_i^{AP}$  may be understood as a function of interpersonal communication ( $Cs_i^{IP}$ ) comprising word-of-mouth and referrals, commercials ( $Cs_i^{ma}$ ) and point of sales promotions ( $Cs_i^{ps}$ ). Hence, the factors influencing the enhancement of customer value may be expressed as:

$$Cs_i^{AP} = f(Cs_i^{IP}, Cs_i^{ma}, Cs_i^{ps})^{\lim_{0 \rightarrow \infty}} \tag{3}$$

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). Liberal environment of the self-service stores for merchandise decisions, service quality and learning about competitive brands are the major attributes of retail self-service stores (Babakus *et al.*, 2004). Retail self-service stores offer an environment of three distinct dimensions of emotions, e.g. pleasantness, arousal and dominance. The change in the customer value observed among the synthetic and OCT products in reference to advertising and promotional strategies used by the firms, may be described as:

$$Cs_i^{AP-t} = Cs_i^{AP} - Cs_i^t \tag{4}$$

The model assumes that if  $N_{rs}$  number of customers in a given retail store has preferred to use OCT products, the change in the customer value may be derived as:

$$\Delta Cs_i^{AP-t} = \sum_{i=1}^{N_{rs1} \dots N_{rsn}} \Delta Cs_i^{AP-t} \tag{5}$$

The customer value across different retail locations and brands in Mexico as exhibited in Table I has been investigated in the study. Customers choose the product which

								Buying decisions towards organic products
Variable segments	Measure parameters	Value estimation parameters for new products	Location-1 (3 retail stores)	Location-2 (4 retail stores)	Location-3 (4 retail stores)	<i>p</i>	$\chi^2$	
Economic variables	$p^a$	Satisfaction over price	0.741	0.722	0.679	0.283*	53.60	<b>241</b>
	$C_i^{Krs}$	Value appreciation in reference to cost of acquiring OCT products	0.949	0.866	0.859	0.462	59.12	
	$E_{vi}$	Satisfaction on application	0.862	0.715	0.656	0.382*	84.22	
Relational variables	$Cs_i^t$	Satisfaction over non-OCT products	0.930	0.748	0.721	0.694**	87.26	
	$Cs_i^{AP}$	Appreciation in customer value due to advertising and promotion	0.946	0.771	0.836	0.672**	64.02	
	$B_i^{vg}$	Brand value of the OCT products	0.953	0.961	0.910	0.759**	52.86	

**Notes:** \* $p < 0.05$ ; \*\* $p < 0.01$ ;  $n = 369$

**Table I.**  
Customer value estimations: brand, preferences and degree of satisfaction

offers maximum utility in reference to the price, awareness and promotional advantage over other non-OCT products. Hence, the customer value for OCT products may be expressed as:

$$\Delta C_{Nrs=1}^{E_{vi}-t} = \alpha (C_i^{E_{vi}} - Cs_i^t) \quad (6)$$

Where,  $C^{E_{vi}}$  represents the customer value in total derived by all factors. Value and pricing models have been developed for many different products, services and assets. Some of them are extensions and refinements of convention models on value driven pricing theories (Gamrowski and Rachev, 1999; Pedersen, 2000). There have also been some models that are developed and calibrated addressing specific issues such as model for household assets demand (Perraudin and Sorensen, 2000). The key marketing variables such as price, brand name, and product attributes affect customers' judgment processes and derive inference on its quality dimensions leading to customer satisfaction. The experimental study conducted indicates that customers use price and brand name differently to judge the quality dimensions and measure the degree of satisfaction (Brucks *et al.*, 2000). The value of corporate brand endorsement across different products and product lines, and at lower levels of the brand hierarchy also needs to be assessed as a customer value driver. Use of corporate brand endorsement either as a name identifier or logo identifies the product with the company, and provides reassurance for the customer (Rajagopal and Sanchez, 2004).

The cost of acquiring OCT products would be the difference in traditional good price, variation in the perceived use value and search cost as indicated by ( $C_i^{sc}$ ) for each customer. Hence, the appreciation of customer value to obtain OCT products may be expressed as:

$$\Delta C_i^{K_{rs-t}} = \alpha [ (E_{vi} + p^a + C_i^{sc}) - C_{s_i}^t ] \quad (7)$$

Where,  $C_i^{K_{rs}}$  represents the cost of acquiring the OCT products from a given retail store. The competitive advantage of a firm is also measurable from the perspective of product attractiveness to generate new customers. Given the scope of retail networks, a feasible value structure for customers may be reflected in repeat buying behavior ( $\hat{R}$ ) that explains the relationship of the customer value with the product and associated marketing strategies. The impact of such customer value attributes in a given situation may be described as:

$$\sum_{N_{sr}=1}^n C_{s_i}^{AP} = \hat{R} = C^{E_{vi}} \quad (8)$$

Repeat buying behavior of customers is largely determined by the values acquired on the product. The attributes, awareness, trial, availability and repeat factors influence the customers towards making re-buying decisions in reference to the marketing strategies of the firm. The decision of customers on repeat buying is also affected by the level of satisfaction derived on the products and number of customers attracted towards buying the same product, as a behavioral determinant (Rajagopal, 2005).

New product attractiveness may comprise the product features including improved attributes, use of advance technology, innovativeness, extended product applications, brand augmentation, perceived use value, competitive advantages, corporate image, product advertisements, sales and services policies associated therewith, which contribute in building sustainable customer values towards making buying decisions on the new products (Rajagopal, 2006a). Attributes of the new products lead to the satisfaction to the customers and is reflected through the product attractiveness ( $F_x$ ). It has been observed that the OCT products have been considered as new and experimental products in Mexico by a significant number of consumers. Hence, product attractiveness ( $F_x$ ) may be explained along the associated variables in the following equation as:

$$F_x = \prod [ \alpha E_{vi} (C_{s_i}^{AP}, q, Z_{xi}, p^a) ]^t \quad (9)$$

Wherein,  $q$  denotes quality of the product and  $Z_{xi}$  represents the services offered by the retailers towards prospecting and retaining customers who intend to buy the OCT products. The customer value may also be negative or low if the attributes are not built into the new product to maximize the customer value as per the estimation of the firm. The perceived use value of customers by market segments  $\alpha E_{vi}$  is a function of advertising and promotion  $C_{s_i}^{AP}$ , and price appreciation  $p^a$  and retailer services  $Z_{xi}$  in a given time  $t$ . Hence,  $\prod$  has been used as a multiplication operator in the above equation. The quality of the product and volume are closely associated with the customer values.

Introduction of new technological products makes it important for marketers to understand how innovators or first adopters respond to persuasion cues. It has been observed in a study that the innovativeness and perceived product newness which are one of the constituents of new product attractiveness were independent constructs that had independent effects on customer's attitude toward the brand and purchase intent for the new product (Lafferty and Goldsmith, 2004).

---

## Hypotheses

Customer values are governed by the perception on economic and relational variables conceived by the buyers on the products. Organizational values and customer relationship approaches of the company also influences the customers to acquire higher values. Measure of customer value as the product efficiency may be viewed from the customer's perspective towards a ratio of outputs (e.g. perceived use value, resale value, reliability, safety, comfort) that customers obtain from a product relative to inputs (price, running costs) that customers have to deliver in exchange. Efficiency value derived can be understood as the return on the customer's investment. Products offering a maximum customer value relative to all other alternatives in the market are characterized as efficient. Different efficient products may create value in different ways using different strategies (output-input combinations). Each efficient product can be viewed as a benchmark for a distinct sub-market. Jointly, these products form the efficient frontier, which serves as a reference function for the inefficient products (Bauer *et al.*, 2004). Accordingly, it has been hypothesized as:

- H1.* Higher perceived value acquired by the customers help consumers to determine their buying decisions on the non-conventional products of unfamiliar brands in the market.

Equations (1) and (3) which describe the impact of customer preference on measuring the customer value factors and role of technology in shifting the customer values, respectively, support the above hypothesis and have been used as the basis of analysis to test the hypothesis:

- H2.* The brand value of the products is enhanced by deploying the communication tools effectively by the firm which help augment the customer value by marginalizing the gap between consumer perceptions and product attributes.

Equations (3)-(5) describe the value drivers associated in determining the customer knowledge, perceptions and use value on the products through the public communications on the brand as disseminated by the firm. These equations have been taken as the basis for deriving the analysis from the relevant variable to justify the *H2*. The design standards and attributes of the new products offered, build the product attractiveness and the customer driven products help in acquiring higher level of satisfaction.

Success of non-conventional product pricing practices refer to the use of information on customer value, competition, and costs (Ingenbleek *et al.*, 2003). An experimental study conducted indicates that customers use price and brand name differently to judge the quality dimensions and measure the degree of satisfaction (Brucks *et al.*, 2000). The value of corporate brand endorsement across different products and product lines, and at lower levels of the brand hierarchy, also needs to be assessed as a customer value driver. Use of corporate brand endorsement either as a name identifier or logo identifies the product with the company, and provides reassurance for the customer (Rajagopal and Sanchez, 2004). Some of the marketplace and experimental studies show that consumers are more sensitive to changes in price than to innovation and new products introduced by the firm (Gourville and Koehler, 2004). There are some critical issues associated to the price sensitive consumer behavior, whether customers are equally price-sensitive while purchasing products for functional (e.g. purchasing

frozen vegetables, toiletries or paper towels) versus hedonic (e.g. purchasing a high technology computer or a video camera) consumption situations and whether perceived value derived during consuming the product influences price sensitivity. It may also be stated that higher price volatility makes consumers more sensitive to gains and less sensitive to losses, while intense price promotion by competing brands makes consumers more sensitive to losses but does not influence consumers' sensitivity to gains (Han *et al.*, 2001). The companies may involve the customers in the product designing process and incorporate their preferences in order to optimize the application derived customer values. So, the hypothesis may be framed as:

*H3.* The brand value, quality of the product, competitive advantages and price along with other relational variables determine the customer value for the non-conventional products of unfamiliar brands in the market.

The factors associated with the customer value in reference to brand value, pricing and competitive advantages have been envisaged in the equations (2), (6) and (7) derived through interdependent variables. These equations on one hand support the *H3* conceptually and also help in deriving the framework for analysis on the other.

Customer values are created towards the new products through individual perceptions, and organizational and relational competence (Johanson *et al.*, 2001). Firms need to ascertain a continuous organizational learning process with respect to the value creation chain and measure performance of the new products introduced in the market. In the growing competitive markets, large and reputed firms are developing strategies to move into the provision of innovative combinations of products and services as "high-value integrated solutions" tailored to each customer's needs than simply "moving downstream" into services (Davies, 2004). Product attractiveness may comprise the product features including improved attributes, use of advance technology, innovativeness, extended product applications, brand augmentation, perceived use value, competitive advantages, corporate image, product advertisements, sales and services policies associated therewith, which contribute in building sustainable customer values towards making buying decisions on the new products (Lafferty and Goldsmith, 2004). The attractiveness of new products is one of the key factors affecting the decision making of customers and in turn is related to market growth and sales. The higher the positive reactions of the customers towards the new products in view of their attractiveness, higher the growth in sales and so in market. Hence, the hypothesis may be described as:

*H4.* The product attractiveness combined with the effective retailing services for the non-conventional products and unfamiliar brands provide competitive advantage.

Equations (8) and (9) describe the integrated effects of communication variables and retailing services in developing product attractiveness and the customer value towards the non-conventional products and unfamiliar brands in order to test the *H4*. The product and brand loyalty is built through an augmented and sustainable customer value.

### Study design

In order to measure the customer value for the OCT products on the above discussed parameters through the model a preliminary investigation has been conducted in

---

11 retail self-service stores in Mexico City including four departmental stores spread over three locations in Mexico. Data have been collected from 400 respondents purposively selected, who were involved in shopping at chosen retail self-service stores in Mexico City administering a semi-structured questionnaire. Data of 31 respondents were omitted from the data analysis due to paucity of information. The respondents involved in buying the OCT products have been stratified brand-wise for the OCT products of The Body Shop, Aubrey Organics, GNC, Procter and Gamble and Natural Solutions. In all, the data of 369 observations were analyzed in the study. Data were collected on the variables closely related towards influencing the customer values. These variables include various perspectives of customer satisfaction and marketing strategies applied in reference to the positioning, attaining high brand value and improving the market share of the OCT products for gaining optimal market share and aggregate returns on consumptions.

### Results and discussion

Values of  $Cs_i^t$ ,  $Cs_i^{AP}$ ,  $B_i^{vg}$ ,  $C_i^{Krs}$ ,  $\alpha E_{vi}$  and  $p^a$  have been determined in the study based on the existing market response to the OCT products in the selected retail outlets. The OCT products were available in the retail stores along with other non-OCT products which provided opportunity for the customers to determine their preferences on the criterion discussed above. Results on the analysis of the above variables refer to the short-term customer values associated with the new products introduced in the retail market by the firms for competitive gains. Relational and economic variables selected for the study are illustrated in Table I. Results presented in the above table reveal that strategic product positioning and effective retailing augment the customer perceptions and help building the long-run customer values towards the non-conventional products owning unfamiliar brands. Hence, the *H1* and *H2* framed for the study get established.

Analysis in the table reveals that customers derived higher perceived use value, price tags and acceptable cost involved in acquiring the product for the OCT products. Satisfaction over the non-OCT products has been found lower in two locations as compare to the other one comprising three retail stores under study. Customer values are reflected in their competitive gains, perceived use values, volume of buying and level of quintessence with the customer relationship management services of the organization. If these variables do not measure significantly, the attitude reversal among the customers to the conventional products may be emerging. However, the study revealed that advertising and promotional strategies of the OCT brands helped customers review their preferences against the synthetic cosmetics and toiletries which appreciated the brand value for the OCT products of the companies in Mexican market.

Table II exhibits the degree of appreciation of customer value generated through the advertising and promotional strategies of the firms towards enhancing the OCT product brands. Value appreciation on the OCT brands by the customers also influences the process of making buying decisions. Analysis of the data presented in the above table reveals that there is a close association among the variables of communication, organizational dimensions and the perceived values of the customers towards new products. Data reveals marginal gaps among these variables which lead to enhance the customer values. The results exhibited in Table II, hence establish the *H3* and *H4* framed for the study.

**Table II.**  
Customer value appreciation through effective communication

Variable segments	Measure parameters	Value estimation parameters for OCT products	Location-1 (3 retail stores)	Location-2 (4 retail stores)	Location-3 (4 retail stores)	<i>p</i>	$\chi^2$
Communication variables	$Cs_i^{IP}$	Inter-personal communication	0.936	0.783	0.891	0.441 **	54.72
	$Cs_i^{PS}$	Point of sales promotions	0.947	0.842	0.781	0.616 *	59.22
	$Cs_i^{ma}$	Media appreciation	0.941	0.732	0.866	0.648 *	61.31
Brand Variables	$Z_{xi}$	Retailer services	0.921	0.736	0.912	0.592 **	64.21
	$F_x$	Product attractiveness	0.943	0.839	0.911	0.398 **	62.81

**Notes:** \**p* < 0.05; \*\**p* < 0.01 and *n* = 369

It may be observed from significant values of the change factor  $\Delta C^{E_{vi}-t}$  representing the perceived use value from the Table III that the appropriate product positioning strategies associated with the quality, pricing and communication for the OCT products augments the customer value over the traditional or synthetic cosmetics and toiletries across the retail locations covered under the study. The level of satisfaction derived through the retail stores and personal selling may be seen from the retailing change factor  $\Delta C_i^{K_{rs}-t}$ , which largely keeps the brand value of the OCT products high in the retail stores in locations 1 and 2 as compared to retailers in location 3. It may also be seen from the data exhibited in the table through the change factor  $\Delta Cs_i^{AP-t}$  that the OCT products enjoy higher influence of interpersonal communication, advertising and point of sales promotions over the traditional products in all the retail stores except in those located in location 3. This may be due to the lower level of involvement of the customers towards the point of sales promotions in these retail stores. The results presented in Table III endorse the *H2* and *H4*.

**Table III.**  
Sensitivity analysis for the variables affecting customer value towards non-conventional products of unfamiliar brands

Perceptual change parameters	Value estimation parameters for non-conventional products	Location-1 (3 Retail stores)	Location-2 (4 Retail stores)	Location-3 (4 Retail stores)	<i>p</i>	$\chi^2$
$\Delta Cs_i^{AP-t}$	Communication affect on OCT vs synthetic products	0.946	0.821	0.921	0.598 *	84.22
$\Delta C^{E_{vi}-t}$	Change in perceived use value between OCT and synthetic products	0.953	0.869	0.626	0.491 *	87.26
$\Delta C_i^{K_{rs}-t}$	Cost of acquiring OCT vs synthetic products by retail stores	0.963	0.824	0.511	0.366 **	64.02

**Notes:** \**p* < 0.05; \*\**p* < 0.01 and *n* = 369

One of the prominent features emerged during the study is that the customer perception is largely governed by the marketing communications. The word-of-mouth, referrals and commercials issued by the firm drive the decision factors of customers towards the new products. The significance of the different variables associated with the product attractiveness which affect the customer value is exhibited in the correlation matrix discussed in Table IV.

It may be observed from the analysis that perceived use value ( $E_{vi}$ ) of the customer is largely affected by the point of sales promotions, advertising and promotional strategies propagated by the firm in media and brand value associated with the products. Data analysis also infers that a good retailing practice ( $Z_{xi}$ ) coupled with strong media appreciation help generating favorable inter-personal communication. Inference may also be drawn from the correlation matrix presented in the table that the brand value for the OCT products is largely contributed by the point of sales promotions as compared to the media appreciation on the brand.

### Managerial implications

Consumer perceptions play a key role in the life cycle of a brand. The role varies according to the stage in the life cycle, market situation and competitive scenario. It may be required for a company to invest on appealing communication strategies for creating awareness on the unfamiliar brands to influence the decision of consumers towards buying these brands they have not tested before. Systematically explored concepts in the field of customer value and market driven approach towards new products would be beneficial for a company to derive long-term profit optimization strategy over the period. On a tactical level, managers need to consider the optimum spread of customers on a matrix of product attractiveness and market coverage. This needs careful attention and application of managerial judgment and experience to measure the customer-value driven performance of the retail stores considering the innovative sales approaches for organic products, store layouts, product displays supported with comprehensive point-of-sales information, brand information and other loyalty parameters of the consumers.

Customer value in terms of satisfaction, use value, retailing practices, price, quality and media appreciation is one of the indicators for building brand value for the non-conventional products and unfamiliar brands of a firm. Customer value concepts may be applied by the firms to evaluate the product performance of an innovative

Measure parameter	$C_i^{Krs}$	$E_{vi}$	$Cs_i^{AP}$	$B_i^{vg}$	$Cs_i^{IP}$	$Cs_i^{PS}$	$Cs_i^{ma}$	$Z_{xi}$
$C_i^{Krs}$	1.0000							
$E_{vi}$	0.9776 *	1.0000						
$Cs_i^{AP}$	0.9021	0.7912	1.0000					
$B_i^{vg}$	0.4324	0.6123	0.0010	1.0000				
$Cs_i^{IP}$	0.6771 ***	0.5072	0.9283	-0.3706	1.0000			
$Cs_i^{PS}$	0.9548	0.9959	0.7330	0.6808 ***	0.4277	1.0000		
$Cs_i^{ma}$	0.7281 **	0.5678	0.9526 *	-0.3038	0.9974 *	0.4915	1.0000	
$Z_{xi}$	0.4766	0.2811	0.8093 **	-0.5865	0.9696 **	0.1937	0.9495	1.0000

Notes: \* $p < 0.05$ ; \*\* $p < 0.01$  and \*\*\* $p < 0.001$  (one-tailed)

**Table IV.**  
Correlation among the variables associated with product attractiveness and influencing the customer value for the OCT products

product like OCT in the given market and determine the approach for gaining competitive advantage over the traditional products. In order to gain the returns in the long run on the aggregate customer value, firms may need to methodically estimate the profitability associated thereof in terms of product attractiveness, volume of buying and market share, while introducing the new products in a competitive market environment (Rajagopal, 2006a). The study proposes framework for future research in measuring the customer value in specific reference to the non-conventional products.

One of the challenges for the marketing manager of a firm is to incorporate the preferences of the customer into the design of new products and services in order to maximize the customer value. An augmented and sustainable customer value builds the loyalty towards the product and the brand. Systematically explored concepts in the field of customer value and market driven approach towards new products would be beneficial for a company to derive long-term profit optimization strategy over the period. Hence, a comprehensive framework for estimating both the value of a customer and profit optimization need to be developed. On a tactical level, managers need to consider the optimum spread of customers on a matrix of product attractiveness and market coverage (Rajagopal, 2006b). This needs careful attention and the application of managerial judgment and experience to measure the value driven performance of the product of the firm. It is necessary for the managers to understand that customer value is context dependent and there exists a whole value network to measure, not just a value chain. This value network will contain important entities far beyond the ones commonly taken into consideration in financial projections and business analyses. Appropriate promotional strategies considering the economic and relational variables discussed in the study may be developed by the managers upon measuring the intensity of leisure shopping and the scope of expanding the tenure of leisure shopping in view of optimizing customer values and profit of the firm.

### **Conclusion**

The model discussed in this paper provides a holistic view of the customer value by proposing ways to measure the different variable associated with it viz perceived use value, product attractiveness, cost of product acquisition, communication and point-of-sales promotions offered to the customers. Analysis of these variables would help the managers develop appropriate strategies to enhance the customer value for the new products and optimize the profit of the firm. Managers may consider the measurement of customer value with the advent of one-to-one marketing media, e.g. targeted direct mail or internet marketing. The opportunities to develop customer relationship management campaigns are enhanced in such a way that it is now both organizationally and economically feasible to support a substantially larger number of marketing segments in a profitable manner.

Customer value in terms of satisfaction is one of the indicators for building profit oriented strategies in a firm. The customer value concepts may be applied by the firms to evaluate the product performance in the given market and determine the approach for short run competitive advantage. In order to gain the returns in the long run on the aggregate customer value, firms may need to methodically estimate the profitability associated thereof in terms of product attractiveness, volume of buying and market share thereof while introducing the new products in a competitive market environment. The framework for measuring the customer values discussed in this paper provides

---

analytical dimensions for establishing the customer relationship by the firm and to optimize its profit levels by gaining the competitive advantage in the short run.

### 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. The questionnaires were translated in Spanish for the respondents in Mexico which might have conveyed varied conceptual sense to some extent. The open ended questions were answered by the Mexican respondents in Spanish and sometimes transcription of the audio might have overlooked some issues. However, to ensure that the data cover a wider spatial and temporal dimensions in the study region, data should be cleansed and filtered with many variability factors affecting the consumer behavior and retailer performance.

### Note

1. The construct of the model developed as analytical frame for the study is based on two major factors – customer value and brand preference in making buying decision on organic products. Influencing variables towards customer value measurement include price, perceived use value of product, market communication including interpersonal communication and advertising, point of sales promotion, product attractiveness and services offered at retail stores. Above variables have been chosen as they are principal drivers of the customer value. Variables related with brand preference of organic products include brand value, cost of acquiring organic products, repeat buying stimulus and retailer services for the brand. All variables have been categorized into economic and relational variable segments and linear equations have been structured in view of their interrelationship.

### References

- Babakus, E., Bienstock, C.C. and Van Scotter, J.R. (2004), "Linking perceived quality and customer satisfaction to store traffic and revenue growth", *Decision Sciences*, Vol. 35 No. 4, pp. 713-37.
- Bauer, H.H., Hammerschmidt, M. and Staat, M. (2004), *Analyzing Product Efficiency: A Customer Oriented Approach*, University of Mannheim, Mannheim, February.
- Brucks, M., Zeithaml, V.A. and Naylor, G. (2000), "Price and brand name as indicators of quality dimensions of customer durables", *Journal of Academy of Marketing Science*, Vol. 28 No. 3, pp. 359-74.
- Davies, A. (2004), "Moving base into high-value integrated solutions: a value stream approach", *Industrial and Corporate Change*, Vol. 13 No. 5, pp. 727-56.
- Donkers, B., Verhoef, P.C. and Jong De, M. (2003), "Predicting customer lifetime value in multi-service industries", ERIM Report Series, April (Ref ETS-2003-038-MKT).
- Gamrowski, B. and Rachev, S.T. (1999), "A testable version of the Pareto-stable CAPM", *Mathematical and Computer Modeling*, Vol. 29, pp. 61-81.
- Ganesh, J., Arnold, M.J. and Reynolds, K.E. (2000), "Understanding the customer base of service providers: an examination of the difference between switchers and stayers", *Journal of Marketing*, Vol. 64, pp. 65-87.
- Giannakas, G. and Fulton, M. (2002), "Consumption effects of genetic modification: what if consumers are right?", *Agricultural Economics*, Vol. 27, pp. 97-109.

- Gourville, J.T. and Koehler, J.J. (2004), "Downsizing price increases: a greater sensitivity to price than quantity in consumer markets", HBS Marketing Research Paper No. 04-01, January.
- Gupta, S., Lehmann, D.R. and Stuart, J.A. (2004), "Valuing customers", *Journal of Marketing Research*, Vol. 41, pp. 7-18.
- Han, S., Gupta, S. and Lehmann, D.R. (2001), "Consumer price sensitivity and price thresholds", *Journal of Retailing*, Vol. 77 No. 4, pp. 435-56.
- Hartmann, P. and Apaolaza, V.I. (2006), "Green value added", *Marketing Intelligence & Planning*, Vol. 24 No. 7, pp. 673-80.
- Hwang, A.S. (2004), "Integrating technology, marketing and management innovation", *Research-Technology Management*, Vol. 47 No. 4, pp. 27-31.
- Ingenbleek, P., Debruyne, M., Frambach, R.T. and Verhallen, T. (2003), "Successful new product pricing practices: a contingency approach", *Marketing Letters*, Vol. 14 No. 4, pp. 289-305.
- Johnson, U., Martensson, M. and Skoog, M. (2001), "Measuring to understand intangible performance drivers", *European Accounting Review*, Vol. 10 No. 3, pp. 407-37.
- Knox, S. (1998), "Loyalty brand segmentation and the customer development process", *European Management Journal*, Vol. 16 No. 6, pp. 729-37.
- Lafferty, B.A. and Goldsmith, R.E. (2004), "How influential are corporate credibility and endorser attractiveness when innovators react to advertisement for a new high technology product?", *Corporate Reputation Review*, Vol. 7 No. 1, pp. 24-6.
- Laroche, M., Bergeron, J. and Barbaro-Forleo, G. (2001), "Targeting consumers who are willing to pay more for environmentally friendly products", *Journal of Consumer Marketing*, Vol. 18 No. 6, pp. 503-20.
- Lusk, J.L., Jamal, M., Kurlander, L., Roucan, M. and Taulman, L. (2005), "A meta-analysis of genetically modified food valuation studies", *Journal of Agricultural and Resource Economics*, Vol. 30, pp. 28-44.
- McEachern, M.G. and McClean, P. (2002), "Organic purchasing motivations and attitudes: are they ethical?", *International Journal of Consumer Studies*, Vol. 26 No. 2, pp. 85-92.
- Mather, D., Knight, J. and Holdsworth, D. (2005), "Pricing differentials for organic, ordinary and genetically modified food", *Journal of Product and Brand Management*, Vol. 14 No. 6, pp. 387-92.
- Morschett, D., Swoboda, B. and Foscht, T. (2005), "Perception of store attributes and overall attitude towards grocery retailers: the role of shopping motives", *The International Review of Retail, Distribution & Consumer Research*, Vol. 15 No. 4, pp. 423-47.
- Nielsen, C.P., Thierfelder, K. and Robinson, S. (2003), "Consumer preferences and trade in genetically modified foods", *Journal of Policy Modeling*, Vol. 25, pp. 777-94.
- Noussair, C., Robin, S. and Ruffieux, B. (2004), "Do consumers really refuse to buy genetically modified food?", *The Economic Journal*, Vol. 114, pp. 102-20.
- Oakley, P. (1996), "High tech NPD success through faster overseas launch", *European Journal of Marketing*, Vol. 30 No. 8, pp. 75-91.
- Paladino, A. (2005), "Understanding the green consumerism: an empirical analysis", *Journal of Customer Behaviour*, Vol. 4 No. 1, pp. 69-102.
- Pedersen, C.S. (2000), "Sparsing risk and return in CAPM – a general utility based model", *European Journal of Operational Research*, Vol. 123 No. 3, pp. 628-39.
- Perraudin, W.R.M. and Sorensen, B.E. (2000), "The demand of risky assets: sample selection and household portfolios", *Journal of Econometrics*, Vol. 97, pp. 117-44.

- Rajagopal (2005), "Measuring variability factors in customer values for profit optimization in a firm – a framework for analysis", *Journal of Economics and Management*, Vol. 1 No. 1, pp. 85-103.
- Rajagopal (2006a), "Measuring customer value and market dynamics for new products of a firm: an analytical construct for gaining competitive advantage", *Global Business and Economics Review*, Vol. 8 Nos 3/4, pp. 187-205.
- Rajagopal (2006b), "Measuring customer value gaps: an empirical study in Mexican retail markets", *Economic Issues*, Vol. 11 No. 1, pp. 19-40.
- Rajagopal and Sanchez, R. (2004), "Conceptual analysis of brand architecture and relations within product categories", *The Journal of Brand Management*, Vol. 11 No. 3, pp. 233-47.
- Reichheld, F.F. and Sasser, W.E. (1990), "Zero defections: quality comes to services", *Harvard Business Review*, September/October, pp. 105-11.
- Reinartz, W.J. and Kumar, V. (2000), "On the profitability of long-life customers in a non-contractual setting: an empirical investigation and implementation for marketing", *Journal of Marketing*, Vol. 64 No. 4, pp. 17-35.
- Reinartz, W.J. and Kumar, V. (2002), "The mismanagement of customer loyalty", *Harvard Business Review*, July, pp. 4-12.
- Rust, R.T., Zeithaml, V.A. and Lemon, K.N. (2004), "Customer centered brand management", *Harvard Business Review*, September, pp. 110-8.
- Wakefield, K.L. and Inman, J.J. (2003), "Situational price sensitivity: the role of consumption occasion, social context and income", *Journal of Retailing*, Vol. 79 No. 4, pp. 199-212.

**Corresponding author**

Rajagopal can be contacted at: [rajagopal@itesm.mx](mailto:rajagopal@itesm.mx)