Factors That Influence Customer Choice of Supermarkets in Karatina Town-Nyeri County, Kenya

Teresiah Karumba[*]**, Peter Ngigi**
Karatina University, C74, Karatina, Kenya

Abstract: This study aimed at assessing factors that customers in Karatina consider when choosing a particular supermarket for purchase of goods and services. Supermarkets have been facing customer loyalty challenge. This make supermarket sub-sector a fundamental area of study with the aim of establishing the real drivers of supermarket choice. Focus was on product and service diversification, operational schedules, promotions and reward schemes and supermarket environment. Stratified random sampling technique was used to pick respondents in the population. The data collected was analyzed using descriptive and inferential statistics. Multinomial logistic regression was used to fit relational models. The study established that special discounts, security, cleanliness, product quality and fast customer service influenced the customers' choice significantly. Free goods, loyalty cards, vouchers, background music, frontage and parking space do not significantly affect choice of the supermarkets. The study observes that supermarkets that have high levels of cleanliness, security, variety and quality products, fast customer service and convenient operational schedules attracts the big proportion of customers.
Keywords: Customer, Patronage, Satisfaction, Supermarket.

INTRODUCTION
BACKGROUND INFORMATION

Retail enterprise has been one of the sectors that has experienced quite a dynamic change over the past years both in the developed and developing countries. Retailing occupies an important position in the economies of all modern societies. Supermarket is an example of retail business, for this particular study, defined as a large self-service retail store with at least 150 square meters' floor space that sells a wide range of household items and foods which are arranged on shelves.

Globally Americans and western Europeans dominated retail market. Until 2015 USA had the largest retail market, with India, Chile, China, Uruguay, Brazil and Armenia being the fastest developing countries [1].

In various countries in Africa shopping malls have developed in large numbers thus boosting the economy of these countries. Despite the rise of supermarkets, hypermarkets and shopping malls all over the continent, South Africa leads in this sector with a great margin.

In Kenya, the retail sector has experienced enormous growth over the years. The increase in purchasing power has led to the development of the new shopping malls. There are a number of supermarkets that have opened which have a number of outlets all over the country both large and small retailers.

In Karatina, the retail sector has been heavily dominated by Uchumi supermarket, Maathai supermarket and Omega Marts. The rise of these retail businesses has led to competition among the ventures. Each supermarket has come up with various strategies in order to win more consumers compared to their competitors. Some of the trends include:
- Stocking variety of goods such as clothes, groceries, bakery among others, such that consumers can shop everything they need under one roof.
- Having a provision for a café or a restaurant. For instance, in Karatina Town both Maathai supermarket and Uchumi supermarket have a bakery from which customers can make orders for goods like birthday cakes or wedding cakes among others. However, Maathai supermarket has gone a notch higher to develop a small restaurant where

customers can have meals. Omega marts supermarket has a bigger restaurant that can accommodate a larger number of customers.

- Adoption of cash, credit/debit cards and payment via M-pesa.
- Improved customer services such as delivering delicate goods to the consumer's home, having customers' attendants in each section such that a customer does not get stranded while looking for particular goods. This reduces the time spent by a customer shopping and improves customer experience.
- Provision of ample parking spaces manned by security personnel to assure customers of the safety of their vehicles.

However, despite the efforts of the supermarkets incorporating all these practices some supermarkets have not managed to retain their customers. Maintaining of loyal customers is quite an important aspect to any retail outlet for the survival in the market [2]. Nowadays, customers have become more sensitive in the choice of retail shops where they do their shopping and most specifically the supermarkets [3].

CONSUMER BEHAVIOR
Various stores have to really invest in the comprehending of consumer demeanor. The economic and social conditions are greatly influenced by the customers. They greatly influence what is to be produced using what resources. Furthermore, in marketing, the customer is the key focus of any enterprise, where a consumer may be looked at as a potential purchaser of a firm's goods and services offered for sale [3]. A sound understanding of consumer behavior is therefore very important in the long run success of any marketing program. It is seen as the cornerstone of any marketing effort [3].

In today's competitive markets, conventional wisdom says that customer is King [4]. When retailing the issue of customer behavior has to come into place. Customer satisfaction is key. This is an area that retailers have got to emphasize on to avoid business failure. Different customers have different taste and preferences for various goods which have to be satisfied. If they are not satisfied the consumers will simply move to another retail store. The consumer may also influence other consumers to or not to buy goods from a retail store. The average dissatisfied customer tells nine out of ten people [5]. In the same vein for a business to succeed it should focus on satisfying customer needs. This can be through organizing itself to meet the needs of the target customers more efficiently than its competitors [6].

Customer satisfaction should be the prime focus of any retail outlet. Satisfaction always encourages a repurchase in a particular store. With the knowledge of customer satisfaction business owners are able to make improvements on their businesses [7]. It's the main tool used for customer retention.

Therefore, retailers need to be quite proactive in carrying out customers' surveys from time to time so as to gauge their services to their customers. This will enable them achieve customer satisfaction, customer loyalty and in turn store patronage by the customers. Like any other business, a supermarket survival and profitability depend on customer patronage [4].

PROMOTIONS AND REWARD SCHEMES
Marketing managers come up with the most effective methods of sales promotions. Importance of advertising, sales promotion etc. will depend on product nature, buying behavior of customers, methods used by competitors and the way in which resources are allocated by the marketing managers [8].

Sales promotion strategies usually have an impact of increasing level of business sales in the period in which they are used [9]. Once the promotions are over the sales tend to drop but they remain at a higher level than before [9].

Grewal [10] found that promotion increases customers' interest towards a particular supermarket. Promotions and discounts tend to attract customers to a business who in turn patronizes the outlet. Customers who receive discounts and promotions show more loyalty to a store [11].

PRODUCT AND SERVICE DIVERSIFICATION
Product diversification is a strategy used by different forms of business as a form of business development. This is mainly done by extending the line of products in the store [12]. Having product diversification in the supermarket is one sure way to attract and maintain loyal customers.

Customers' motives for shopping in a particular place are a function of many variables; some of which are within the consumer and others in the retail outlet environment. One such factors that influence patronage is merchandise. Where customers consider product variety and assortment, styling or fashion, guarantees and pricing.

A supermarket should also diversify products [13-15] and services offered to customers. For instance, having shelves assistants to assist customers help in reducing the shopping time taken by the customers and thus reduce crowding in the supermarkets.

Store environment

Customer choice of a supermarket may be greatly influenced by the layout and environment of a store [16]. Store image is the way consumers visualize the store in their minds [17]. Appropriate use of lighting, color, furnishing etc. stimulates the emotions of customers which in turn affects their behavior towards a store [18]. Shoppers prefer a store environment that isclean and tidy, caters for children and makes shopping an easy task [19]. Customer willingness to shop from a particular store may be increased by a serene atmosphere in the store [20, 21].

Store atmospherics such as good inner plan, attractive product display, and easiness to reach the shelves affect store loyalty [22].

Modern supermarkets are considered to be clean and comfortable, shopping has been made easy by use of trolleys. A good surrounding is a major marketing tool that modern stores are using to fascinate lots of customers [20].Tidiness and cleanliness of supermarket facilities are highly considered by the customers [4, 20].

Operational schedules of a store

Customers who shop in supermarkets are greatly influenced by the operating hours of supermarkets [4, 3]. In Kisii town it was found that convenient operating hours influenced choice of supermarket to a great extent [3]. Customers are more attracted to supermarket stores that have longer opening duration. This eventually leads to store patronage in those particular supermarkets.

MATERIALS AND METHODS

Sample and sampling techniques

Stratified random sampling method was adopted in the study where the target population was partitioned according to shopping point, the three supermarkets in Karatina.

$$ni = \frac{Ni}{1 + Ni\varepsilon^2}$$

Where n_i- Sample size for the ith stratum, **Ni-**size of the population, **Ɛ-**precision (for this study **Ɛ=0.05**).

Interviews with the supermarket branch managers were carried out to get the number of customers served between the months of January and March. The data is as shown below:

SUPERMARKET	CUSTOMERS SERVED (JAN-MARCH)	SAMPLE FROM EACH STORE
MAATHAI	192,048	320
UCHUMI	33,624	56
OMEGA MARTS	14,329	24
TOTAL	240,001	400

Data Analysis

A questionnaire was the main research instrument for data collection. The data collected was in turn analyzed using descriptive statistics. Tables and charts were used also in explaining the findings. A multinomial logistic regression model was fitted to predict choice of supermarket in reference to the independent variables. A multinomial logistic regression model compares a number of dichotomies. When there are j categories of the response variable, the model consists of j-1 logit equations which are fitted simultaneously [23]. Normality, linearity and homoscedasticity are assumed in this particular model. Multinomial logistic regression allows for comparison of unordered response category and a predetermined reference category. In this study to model which of the three supermarkets is likely to be selected by a customer, two logit models were fitted; one comparing Uchumi supermarket with reference category Maathai supermarket and another Omega Marts and Maathai supermarket. Hence the choice of supermarket model between three supermarkets was therefore represented using two (i.e. j-1) logit models.

$$log \frac{Pr\{Y = Uchumi\ Supermarket\}}{Pr\{Y = Maathai\ Supermarket\}} = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

$$log \frac{Pr\{Y = Omega\ Marts\ Supermarket\}}{Pr\{Y = Maathai\ Supermarket\}} = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

X_1= Supermarket Environment, X_2=Product and service variety, X_3= Product Promotions, X_4= Operational schedule.

The model above provides two estimates. Effect of the explanatory variables X_k was assessed for each logit model; for instance, the effect of X_1 on the choice between Uchumi Supermarket and Maathai Supermarket and the effect of X_1 on the choice between Omega Marts and Maathai Supermarket and also for the whole model, effect of X_1 across all supermarkets in the study. The multinomial logistic regression model allows the effects of the explanatory variables to be assessed across all the logit models and provides estimates of the overall significance (i.e., for all comparisons rather than each individual comparison) [23]. The general multinomial logistic regression model is:

$$log \frac{Pr\{Y = j\}}{Pr\{Y = j\}} = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \cdots \ldots \ldots \ldots + \beta_k X_k + \varepsilon$$

Where j is identified supermarket and j is the reference supermarket.

Model fit statistics

The effect of the explanatory variables on the response were assessed by comparing the deviance statistics (-2LL) for the two nested models. The resulting statistic is tested for significance using the chi-square distribution with the number of degrees of freedom being equal to the difference in the number of terms between the two models.
$-2LL = (-2LL_P) - (-2LL_{P+q})$ (LL means log likelihood)

Where p is the smaller, nested model and p+q is the larger model. Significance of the explanatory variables for individual supermarket comparisons is estimated using z and Wald statistics [23]. The z-statistic is simply the estimate divided by the standard error and is tested for significance using the two-tailed test. The Wald statistic can also be used to test for significance, which is z^2 and is distributed as a chi-square with one degree of freedom [23].
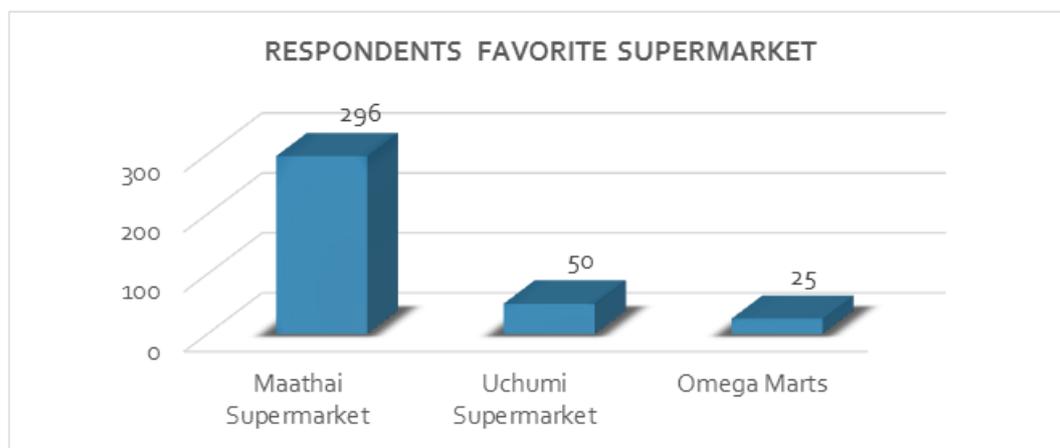
DISCUSSION OF THE FINDINGS

Fig-1: Respondents Favorite Supermarket

From the figure, it was evident that most of the customers in Karatina prefer to shop at Maathai supermarket followed by Uchumi and Omega.
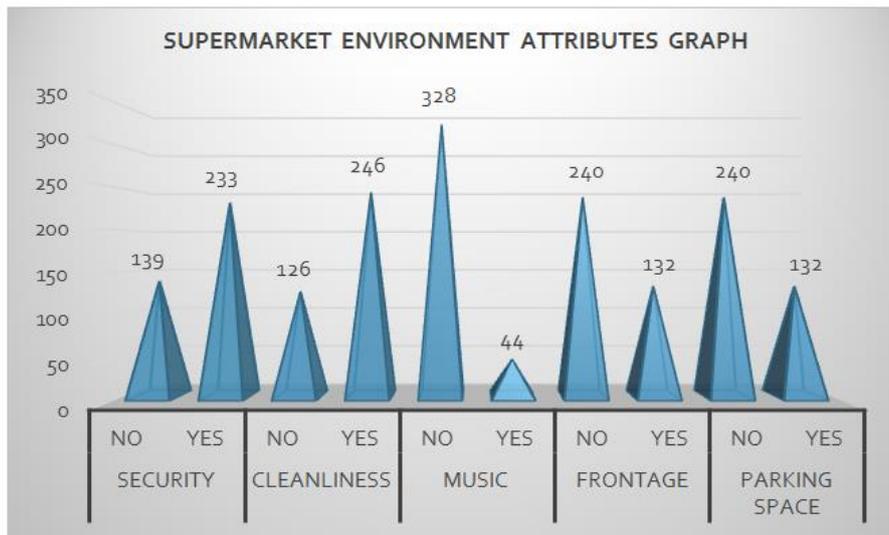
Fig-2: Supermarket environment attributes

Many customers considered supermarket security (233(62.63%)) and cleanliness (66.13 % (246)) while choosing a particular supermarket to shop in. However, many customers did not consider background music (88.17 % (328)), parking space (64.52%) and supermarket frontage (64.52%) when choosing a supermarket.
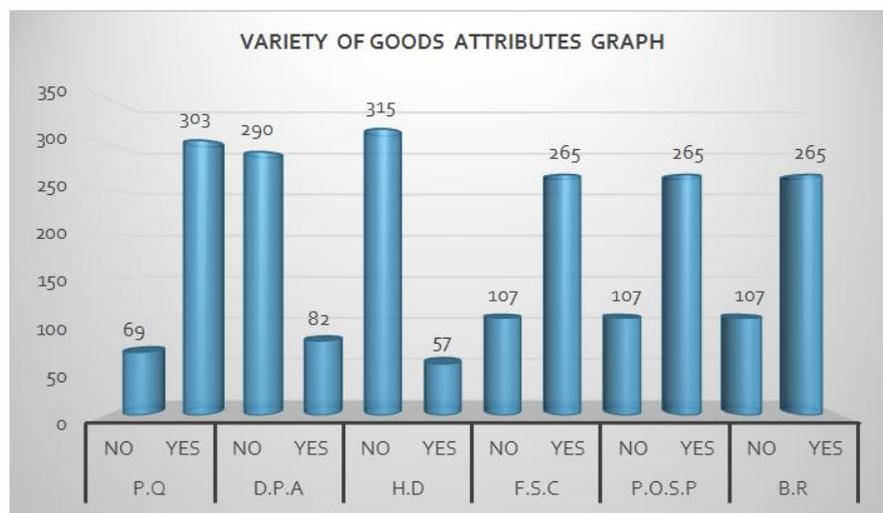
Fig-3: Variety of goods attributes

Where: P.Q-Product Quality, D.P.A-Delivery to the Parking Area, H.D-Home Delivery of Delicate Goods, F.C.S-Fast Customer Service, P.O.S.P-Provide out of Stock Goods, B.R-Brand/Product Range.

Most respondents preferred a supermarket that had goods of good and high quality, fast customer service, a supermarket that provided of out of stock goods and a supermarket that had brand/product range. This attributes had high percentages on the yes category. On the other hand, a great percentage of customers did not consider home delivery of delicate goods and delivery of goods to the parking area as they chose their favorite supermarkets.

Fig-4: Product promotion attributes

For most customers, choice of supermarkets was influenced by special discounts (62.7 %(233)). Free goods, loyalty cards and vouchers did not influence the choice of most customers.
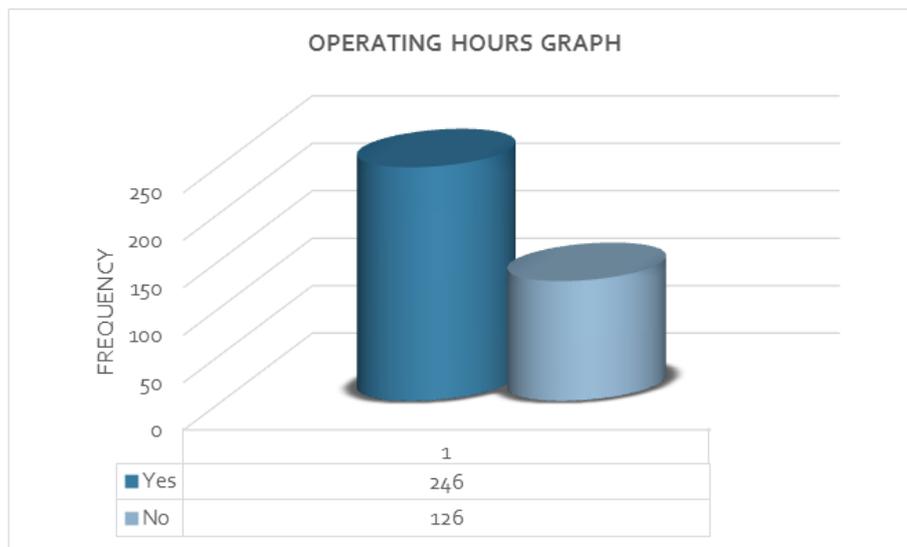

Fig-5: Operating hours' attribute

A good number 66.1% (246) of the respondents were greatly influenced by the operating hours of supermarket stores as they chose their favorite supermarket whereas to 33.9% (126) of the respondents their choice of supermarket was not influenced by the operating hours of the supermarkets.

Table-1: The model results

Model Fitting Information format table				
Model	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square	Df	Sig.
Intercept Only	331.588			
Final	130.147	201.441	8	.000

The model $log \frac{Pr\{Y=j\}}{Pr\{Y=J\}}$ refers to the log odds of a customer choosing a particular supermarket in reference to another. A choice that was influenced by operational schedule, product promotion, variety of goods and services and supermarket environment. The overall goodness of fit statistics shows that the customer's supermarket choice can be accurately be determined by full model rather than the intercept only model as p<0.05.

Table-2: Likelihood Ratio Test

Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	130.147[a]	0.000	0	
Supermarket Environment	167.520	37.372	2	.000
Variety of Goods	284.707	154.559	2	.000
Promotions	151.152	21.005	2	.000
Operating Hours	137.880	7.733	2	.021

In reference to the table above the variables that distinguish customers who shop at different supermarkets can be clearly observed, they include; Supermarket environment, Variety of goods, Promotions and Operating Hours (chi-square=37.372, 154.559, 21.005 and 7.733 respectively; p<0.05 in all cases)

Table-3: Parameter Estimates

Favorite supermarket for the respondent		B	Std. Error	Wald	df	Sig.	Exp (B)
Maathai Supermarket	Intercept	2.117	.812	6.794	1	.009	
	Supermarket environment	-.599	.633	.897	1	.344	.549
	Variety of goods	5.036	.671	56.236	1	.000	153.792
	Product Promotions	2.649	.604	19.239	1	.000	14.140
	Operating Hours	-.201	.570	.124	1	.725	.818
Uchumi Supermarket	Intercept	-18.281	.672	739.281	1	.000	
	Supermarket environment	19.574	0.000		1	.027	316834256.696
	Variety of goods	-.043	.668	.004	1	.948	.958
	Product Promotions	1.463	.570	6.594	1	.010	4.317
	Operating Hours	1.482	.674	4.841	1	.028	4.402
The reference category is: Omega Marts.							

Source: Data Analysis Results 2017

Interpretation

While holding all the explanatory variables constant a customer is likely to choose Maathai Supermarket 2.117 more compared to Omega Marts.

The log odds of a customer selecting Maathai Supermarket as opposed to Omega Marts decreases by 0.599 with every unit increase in the supermarket environment. This is equivalent to an odds ratio of 0.549 which is actually less than 1.

Unit increase in the variety of goods whilst controlling other variables, the log odds of a customer selecting Maathai Supermarket as opposed to Omega Marts increases by 5.036. This is equivalent to an odds ratio of 153.792. Hence for a unit change in the variety of goods a customer is more likely to choose Maathai Supermarket.

The log odds of a customer selecting Maathai Supermarket as opposed to Omega Marts increases by 2.649 with every increase in product promotions. This is equivalent to an odds ratio of 14.140. Hence for a unit change in the product promotions a customer is more likely to choose Maathai Supermarket.

For a unit change in the operating hours a customer is less likely to choose Maathai Supermarket. This is because increase in the operating hours while controlling other variables the log odds of a customer selecting Maathai Supermarket as opposed to Omega Marts decreases by 0.201. This is equivalent to an odds ratio of 0.818.

Equation 1: Model under Maathai Supermarket in reference to Omega Marts Supermarket.

$$log \frac{pr(Y = Maathai\ supermarket)}{pr(Y = Omega\ Marts)} = 2.117 - 0.599X1 + 5.036X2 + 2.469X3 - 0.201X4$$

While holding all the explanatory variables constant a customer is likely to choose Uchumi Supermarket 18.281 less compared to Omega Marts.

Unit increase in the supermarket environment while controlling variety of goods, product promotions and operating hours the log odds of a customer selecting Uchumi Supermarket as opposed to Omega Marts increases by

19.574. This is equivalent to an odds ratio of 316834256.696. Hence for a unit change in the supermarket environment a customer is more likely to choose Uchumi Supermarket.

For unit increase in the variety of goods while controlling supermarket environment, product promotions and operating hours the log odds of a customer selecting Uchumi Supermarket as opposed to Omega Marts decreases by -0.043. This is equivalent to an odds ratio of 0.958. Hence for a unit change in the variety of goods a customer is less likely to choose Uchumi Supermarket.

With unit increase in the product promotions while controlling supermarket environment, variety of goods and operating hours the log odds of a customer selecting Uchumi Supermarket as opposed to Omega Marts increases by 1.463. This is equivalent to an odds ratio of 4.317. Hence for a unit change in the product promotions a customer is more likely to choose Uchumi Supermarket.

Increase in the operating hours while controlling supermarket environment, variety of goods and product promotions the log odds of a customer selecting Uchumi Supermarket as opposed to Omega Marts increases by 1.482. This is equivalent to an odds ratio of 4.402. Hence for a unit change in the operating hours a customer is more likely to choose Uchumi Supermarket.

Equation 2: Model under Maathai Supermarket in reference to Omega Marts Supermarket.

$$Log \frac{pr(Y = Uchumi\ Supermarket)}{pr(Y = Omega\ Marts)} = -18.2 + 19.57X1 - 0.043X2 + 1.46X3 + 1.48X4$$

Where;
    X1=Supermarket Environment.
    X2=Variety of Goods/Product and Service Diversification.
    X3=Product Promotions.
    X4=Operational Schedules.

SUMMARY AND CONCLUSIONS
The level of competition in the current market has been escalated by liberalization and globalization. Thus, it is the duty of the firms to find ways of winning and retaining customers. From the study, the following conclusions can be drawn regarding customer choice of supermarkets in Karatina Town, Kenya. The study revealed that customers were greatly attracted to supermarket stores that were clean and had good security. This is likely to lead to store patronage.

It was evident from the study that product and service diversification in a supermarket influenced customer behavior. Quality products, wide range of products and provided out of stock goods attracted lots of customers who later patronized the store. Surprisingly home delivery of goods and delivery of goods to the parking area did not capture the attention of many customers in the Town.

The study further revealed that promotions and reward schemes had a significant effect on choice of supermarkets. Special discounts offered by the supermarkets pulled more customers to the stores.

The study concludes that indeed operating schedules affect the behavior of customers in Karatina towards supermarkets.

RECOMMENDATIONS
Clearly supermarket stores in Karatina are experiencing tough times as a result of customer switching from one store to another. A stiff competition has also increased among the three supermarkets in Karatina town thus winning customers has become quite crucial. Hence as a result of unsatisfactory experience customers shift to other stores. Thus, we recommend that the supermarkets in Karatina should be carrying out customers' surveys from time to time to enable them have an understanding of what is really pushing customers to choose particular stores. With this the supermarket will be up to date with the preferences of the customers.

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