

BUYERS' BEHAVIOR OF SELECT ELECTRONIC DURABLES WITH SPECIAL REFERENCE TO ASMARA CITY - STATE OF ERITREA

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Abstract

Buyer's behavior is an inter-disciplinary study that has resulted from the advances in several areas of the behavioral sciences. A study of this kind is needed to facilitate and understanding of buyers' behavior of African nation which has different types of culture, values, interest, and economic background compared to Asian and European countries. The main aim of the study is to identify the factors that influence the Buyers' behavior on select electronics durable goods and also concentrate on evaluating the effectiveness of the factors in State of Eritrea towards the buyer's behavior. The core of the study centers on the level of purchasing behavior and satisfaction.

Keywords: Buyer Behaviour, Electronic goods, Evaluating effectiveness, levels of purchase, Buyer satisfaction.

Introduction

The Consumer Durables industry in State of Eritrea consists of durable goods and appliances for domestic use such as televisions, refrigerators, air conditioners and washing machines. Gadget such as cell phones and kitchen appliances like microwave ovens were also incorporated in this group. The division has been spectacularly important expansion in recent years, facilitated by several drivers such as the emerging retail boom, real estate and housing demand, better disposable profits and an overall augment in the level of wealth of an important section of the population. The Eritrean electronic markets are symbolized by major international players such as Sony, Panasonic, LG, Nokia, Samsung, Blue Star, MIRC Electronics, Philips, Whirlpool and etc.

The objective of this paper is: to provide a framework to study buyers' behavior for durable electronic goods in State of Eritrea. The electronic industry help us to identify important characteristics about electronic products like television, mobile phones, washing machines, camcorders, laptops, etc. First, electronic goods are durable; and the consumers usually buy electronic goods with the intention of keeping them for a long period of time; further, the consumers buy electronic goods looking for the need of fulfillment, good features, good design, etc. Hence, the purchase of electronic goods is highly based on comparison of various factors which cannot ascertain every characteristic of the electronic goods before buying the product as far as our utility function is concerned.

The main aim of the study is to identify the factors that influence the Buyers' behavior on select electronics durable goods and also concentrate on evaluating the effectiveness of the factors in State of Eritrea towards the buyer's behavior. Buyer's behavior is an inter-disciplinary study that has resulted from the advances in several areas of the behavioral sciences. The combined perspectives of psychology, sociology, anthropology and economics make positive contributions to our understanding of buyer's behavior.

The study of buyer's behavior involves how individuals and organization discovers, evaluate, consume, and dispose of products and services. It attempts to provide answers to the questions: Who buys? When do they buy? Where do they buy? Why and how do they buy? Three inter-related

activities comprise all the behavior of buyers: pre-purchase activities, purchase activities, and consumption activities. These categories are true for individual consumers and industrial consumers. The basic theories and methods of analyses are essentially the same. The field of studying buyer's behavior in State of Eritrea is relatively new approach when compared with other marketing studies.

Statement of the Problem

Marketing is about satisfying consumers. Whether companies seek to gain a competitive edge or satisfy consumers' needs, an understanding of consumer behavior in State of Eritrea is a prerequisite of good practice. As Atticus Finch in Harper Lee's 'To Kill a Mockingbird' noted, "you never really understand a person until you consider things from his point of view and until you climb into his skin and walk around it", consumer behavior theory provides glimpses of consumers' point of view and allows companies to understand consumers as individuals, information searchers and decision-makers. Being in tune with Eritrea, consumers are a must for businesses. However, Jon Weaver, the Marketing Manager at Bourn mouth Borough Council thinks that understanding consumer's wants is a big challenge. A new trend has emerged in the world where more and more product outcomes are venturing as market offerings in all kinds of businesses, agriculture and other useful areas. Due to the spread of innovations, technology and communication as well as new free trade practices that changes product offerings are fast coming out of the web of traditional activities to high level non-traditional activities especially, in the area of durability products. All these signs indicate that Eritrean buyers are responsive to changes and are well positioned to take advantage of these situations.

A number of advances in the analysis of durability have appeared. However, some areas of misperception and inaccuracy with regard to the implications of durability. It was learnt that not many studies have been made on African nation's buyers' behavior related to durable goods. Evidently, it is in the embryonic stage of development. Research in the area is scant and issues are not yet clearly formulated and adopted coherently. Hence, the researcher has made an attempt to study buyers' behavior in response to select electronic durable goods confined to Asmara city (capital of State of Eritrea) for the reasons of academic viability as well as purposeful consideration. A study of this kind is needed to facilitate and understanding of buyers' behavior of African nation which has different types of culture, values, interest, and economic background compared to Asian and European countries. The

study on Asmarian buyers' behavior helps to know, where the good customers are, what they want, how they purchase and react to the product. The study also helps to know, how various marketing activities are to be performed with regard to various multi-cultural buying behavior.

Objectives of the Study

To analyze the demographic variables influencing the level of buying the select electronic durable goods among the Asmarian buyers.

Research Methodology

A research design of Asmara city is the detailed blueprint used to guide a research study toward its objectives. The process of designing a research study involves many interrelated decisions. The most significant decision is the choice of research approach, because it determines how the information will be obtained. To design something also means to ensure that the pieces fit together.

The validity of research depends on the systematic method of collecting the data and analyzing them in a sequential order. In the present study, extensive uses of both primary and secondary data were collected systematically.

Field survey method was employed to collect primary data from 1000 respondents living in and around Asmara City, State of Eritrea. For this purpose a well-structured questionnaire was used for collecting the data.

Sampling Method

First-hand information for the present Asmara city research has been collected from the respondents. For this purpose the universe comprised of the entire city of Asmara i.e. all the areas. Since, it was not feasible to study the entire Asmara; the researcher drew a sample. To make the sample representative, researcher used Stratified random sampling technique. Therefore, researcher divided the entire Asmara into five zones as divided by the government of Eritrea on geographical basis. Four areas from each zone were chosen at random and further four streets were randomly chosen from each area, which were divided into two categories i.e. commercial streets and non-commercial streets. From each selected area, the required number 25 percent of households was selected based on Judgment Sampling (or) Purposive Sampling by using some common criteria like reference groups, subject knowledge, occupational status and their attitude to co-operate for this study. This totaled into one thousand respondents in all, which was collected for the time period of one year. Hence, it is finally derived that the sample size chosen for this study was 1000 sample respondents.

Sources of Data Collection

The study uses both primary and secondary data.

Construction of Questionnaire

The key aspects of the present research to be studied were identified for the preliminary interview (Pilot Study) with few selected respondents. The questionnaire so drafted was circulated among some research experts and research scholars for a critical view with regard to the format, sequence, wording and the like. The questionnaire was drafted in the light of their comments. The questionnaire consisted of 30 questions, of which 20 referred to the Asmarian buyers' behavior in possessing durable goods (viz, digital camera, DVD player, iPods, mobile phone, personal computer, refrigerator, television, washing machine, air conditioner, camcorder, iPhone, iPod video players, microwave, Home theatre, personal laptop and plasma TV). The last ten questions referred to the respondents' (and their household) demographic characteristics. The intent was to encompass those product categories, the consumption of which can establish differences in the Asmarian buyers' behavior of different people of Eritrea. Not only were the usage and possession of a product analyzed, but also the type of the consumed product, the importance of certain criteria when choosing and purchasing the product, usage frequency, satisfaction level, and also the brand preference.

Frame Work of Analysis

The core of the study being "A study on Buyers' Behavior of Select Electronic Durables with Special Reference to Asmara City - State of Eritrea", the study centers around the independent variables influencing the level of buyer behavior.

Approach to Assess the Extent of Utilization

The differences in the extent of Asmara people behavior related to electronic goods purchase by different types of respondents based on their age, educational qualification, experience, income level, family size, marital status, nature of family was studied by means of Multiple Regression Analysis to ascertain the variables influencing the level of buying behavior.

Multiple Regression Analysis

Multiple regression is a statistical technique that allows the researcher to predict someone's score on one variable on the basis of their scores on several other variables. When there are two or more independent variables, the analysis that describes such relationship among the variables is called the multiple regression. This analysis is also adopted when one dependent variable is performing the function of two or more independent variables. In

multiple regression, a linear composite of explanatory variables is formed in such a way that it has maximum correlation with an active criterion variable. The main objective for using this technique is to predict the variability of the dependent variable based on its co-variants with all the other independent variables. For example, in this study it might help in predicting how much an individual enjoys their products. Variables such as age, gender, and marital status, nature of the family, educational qualification, occupational status, income, and socio-economic status might all contribute towards Asmarian buyers' behavior and satisfaction. If the researcher collected data on all of these variables, perhaps by surveying a few hundred members of the public, the researcher would be able to see how many and which of these variables gave rise to the most accurate prediction of Asmarian buyers' behavior and satisfaction. It is useful in predicting the level of the dependent phenomenon, if the levels of independent variables were given, the linear multiple regression problem is to estimate the coefficients $\beta_1, \beta_2, \beta_3, \dots, \beta_j,$ and β_0 such that expression,

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_j X_k$$

Provided a good estimate of an individual Y score based on the X scores.

Where,

Y = Level of influence on buying behavior

X₁ = Respondents Age

X₂ = Respondents Gender

X₃ = Respondents Residence area

X₄ = Respondents Marital Status

X₅ = Respondents Nature of Family

X₆ = Respondents Size of the Family

X₇ = Respondents Educational level

X₈ = Respondents Occupational

Status

X₉ = Respondents Monthly Income

X₁₀ = Respondents Wealth position

X₁₁ = Respondents Reason for

Purchase of Electronics

And $\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_j X_k$ are the parameters to be estimated.

Review of Literature

Newman and Staelin (1971) in their research article entitled "Multivariate Analysis of Differences in Buyer Decision Time" focused on studying the conventional demographic variables in explaining the differences of buyers' decision. The study results concludes that the respondent's own judgment or need to trust others, and, more importantly prior experience, which affected both information seeking and decision time. Secondly,

the decision process for one-half of the buyers of major consumer durables lasted only a week or so implies a rapid turnover of many active prospective purchasers. Thirdly, information on most factors significantly related to decision time typically is not readily available for marketers or media audiences.

Quails (1987) in his research article entitled “Household Decision Behavior: The Impact of Husbands' and Wives' Sex Role Orientation” focused to study the husband and wife decision behavior in buying of durable products. The study results found that household buying decision behavior is better explained in the context of a theoretical network of systemic household relationships rather than through a series of bivariate family relationships.

Benedict et al., (1999) in their study working paper entitled “Consumer Behavior Research in Emerging Consumer Markets: The Case of the Optimum Stimulation Level in South Africa” highlights the measurement invariance and nomological relations involving OSL in one of Africa's most important ECMs - South Africa. Their finding says that, many respondents are challenged severely economically and educationally, many have probably never had a job and some are illiterate and the results provide evidence on the cross-cultural generalizability of OSL and exploratory consumer behavior theory. They found a high degree of stability in the OSL structure across these four major ethnic groups in South Africa.

Johnson and Selnes (2004) in their research article entitled “Customer Portfolio Management: toward a Dynamic Theory of Exchange Relationships” highlights that the management of an entire portfolio of customers who are at different relationship stages requires a dynamic theory of exchange relationships that captures the trade-offs between scale of economies and lifetime customer value. This article contributes to the understanding of relationship management by developing a typology of exchange relationship mechanisms and a model of relationship dynamics and by simulating the model to provide guidelines for customer portfolio management. Finally, the study results found that a key to the creation of value through closer relationships lies in bringing weaker relationships into a portfolio in the first place. Another finding is that firms that position themselves toward offerings with low economies of scale, such as personal services, must build closer relationships to create value.

Sinha and Banerjee (2004) in their research paper entitled “Store choice behavior in an evolving

market” designed the framework evolved for evaluating effectiveness of newer store format is necessary since it has a major impact on the overall profitability of the retailing business. The study finally concludes that, customers in a developing market such as India do not require the service paraphernalia offered by many of the new store formats emerging in the market and notes that this may cast a serious doubt over the retail revolution, which has taken shape in the Indian markets lately.

Sudarsana and Rajarashmi (2004) in their research paper entitled “Buyer Behavior of Home Appliances with special reference to Microwave Products in Bangalore City” explored the market condition and consumer behavior towards the purchase of microwave durable electronic product. The study results that, 1. Electronics industry was in its nascent stage of development till the 1970s. 2. Today, it is one of the fastest growing industries in the country. It has experienced a fast transformation towards the end of the century, which leads to the complete revolution in the Indian electronic sector. 3. Common consumers perceived Microwaves as a luxury item so it has to change their perception in a big way in creating the market potential. 4. All buyers are having different tastes, likes, and dislikes and adopt different behavior pattern while making buying decisions.

Analysis Multiple Regression Analysis

The following analysis shows the relationship between the respondents' level of influencing the buying behavior of durable electronic products and the eleven independent variables that were studied. It was found that, all the eleven variables were closely associated with the level of influencing the buying behavior of durable electronic products of the Asmarian consumers.

The eleven variables used in multiple regression analysis are shown below. They are:

- Age
- Gender
- Area of residence
- Marital status
- Nature of the family
- Size of the family
- Educational qualification
- Occupational status
- Monthly income level
- Wealth status
- Reason for purchase of products

In order to measure the interdependence of the independent factors and their total contribution to the level of influencing the buying behavior of the

respondents in the study area, a step wise multiple regression models was used. The results of the analysis (simple regression and inter correlation matrix) were put into multiple regression analysis and the details are shown in the table below:

Multiple Regression Analysis of Buyers' Behavior of Durable Electronic Products (Co-Efficient Table)

MULTIPLE REGRESSION ANALYSIS OF BUYERS' BEHAVIOR OF DURABLE ELECTRONIC PRODUCTS (CO-EFFICIENT TABLE)

S.No.	Variables	Unstandardized coefficients		Standardized coefficients	T	Sig.
		B	Std. Error	Beta		
	(Constant)	2.27	0.20		10.91	
1.	Age	0.04	0.03	0.05	1.34	0.18
2.	Gender	-0.43	0.05	-0.83	-0.81	0.41
3.	Area of Residence	-0.45	0.04	-0.83	-0.92	0.35
4.	Marital status	-0.18	0.04	-0.17	-4.23	0.00
5.	Nature of the family	-0.01	0.04	-0.12	-0.39	0.69
6.	Size of the family	0.00	0.02	0.00	0.10	0.91
7.	Educational qualification	0.08	0.03	0.08	2.34	0.01
8.	Occupational status	0.07	0.02	0.10	3.07	0.00
9.	Monthly income	0.00	0.00	0.00	0.10	0.91
10.	Wealth status	-0.02	0.01	-0.07	-2.37	0.01
11.	Reason for purchase	0.02	0.01	0.07	2.36	0.01

R-Value	R ² -Value	Degree of Freedom- V ₁	Degree of Freedom- V ₂	F Value	Significance
0.247	0.61	11	978	5.79	1% level

The multiple linear regression component (Dependent Variable) is found statistically a good fit as R² is 0.6 which shows that the independent variables contribute 60 % of the variations in the respondents' level of influencing buying behavior of durable electronic products and this is statistically significant at 1% level and 5% level. The above table indicates that the co-efficient of factors like Age, Size of the family, Educational qualification; Occupational status, Monthly income and Reason for purchase of products are positively associated. On the other hand, the co-efficient values for the variables of Gender, Area of residence, Marital status, Nature of family, and Wealth status are negatively associated with the level of influencing the buying behavior of durable electronic products in the study area.

Findings & Conclusion

To measure the interdependent of independent factors and their total contribution to the level of influencing the buying behavior of the respondent in the study area, a step wise multiple regression was used. The multiple linear regression component (Dependent Variable) is found statistically a good fit as R² is 0.60 which shows that the independent variables contribute 60 % of the variations in the respondents' level of influencing buying behavior of durable electronic

products and this is statistically significant at 1% and 5% level. The factors like Age, Size of the family, Educational qualification; Occupational status, Monthly income and Reason for purchase of products are positively associated. On the other hand, factors like Gender, Area of residence, Marital status, Nature of family, and Wealth status are negatively associated with the level of influencing the buying behavior of durable electronic products.

Generally, a buyer can influence through several sources like Personal influence (Family, Friends, Neighbours, etc), Commercial influences (Advertising, Salespeople, Retailers, Dealers, Packaging, point-of-sale displays), and Public influence (Newspapers, Radio, Television, Consumer Organisations, and magazines. The usefulness and influence of these aspects will vary by product and by customer. However, according to this study Asmarian buyers are mostly influenced by personal variables like age, family size, education, occupation and income. Hence, the challenge for the marketing team is to identify which sources and factors are most influential in their target market.

References

1. William J. Quails (1987) "Household Decision Behavior: The Impact of Husbands' and Wives' Sex Role Orientation", Journal of Consumer Research, September 1987, Vol. 14; page 264-279.
2. Jan-Benedict, Steenkamp and Steven M. Burgess (1999) "Consumer Behavior Research in Emerging Consumer Markets: The Case of the Optimum Stimulation Level in South Africa", William Davidson Institute Working Papers Series, William Davidson Institute at the University of Michigan, 1999, Number 251.
3. Michael D. Johnson & Fred Selnes (2004) "Customer Portfolio Management: Toward a Dynamic Theory of Exchange Relationships", Journal of Marketing, April 2004, Vol. 68, pp. 1-17.
4. Piyush Kumar Sinha and Arindam Banerjee (2004) "Store choice behavior in an evolving market", International Journal of Retail and Distribution Management, 2004, Vol. 32; Number 10, page 482.
5. Dr. G. Sudarsana Reddy and Ms. Rajarashmi P.S (2004) "Buyer Behavior of Home Appliances with special reference to Microwave Products in Bangalore City", Indian Journal of Marketing, January 2004, Vol. XXXIV; Number 1.