

# An Examination of the Impact of Sources of Information on Consumer Preference for New Durable Electronic Goods in Kano Metropolis

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## Abstract

The study was designed to assess the impact of sources of information on consumer preference for new durable electronic goods in Kano Metropolis. Specific objectives of the study cover the sources of information used by consumers in their purchase decision of innovative durable electronic goods and the extent to which sources of information used by consumers affect their purchase decision of innovative durable electronic goods. The study population was the entire consumers that purchases electronic products from the 8 local governments areas selected for the study. The researcher used sample size of 500 respondents and data were obtained using questionnaires. Data presentation and discussions were supported with chart and tables to make the whole work easy to read and understand by all and sundry. The study revealed that the diffusion of new durable electronic goods is greatly enhanced by TV advertorials, suggestions by friends/relations and price discounts. Other sources of information used by consumers in the purchase of durable electronic products in the descending order are advertisements on radio, advertisements in magazines, trade shows, advertisements on billboards, suggestions by salesmen and handbills, so the researcher recommended that Proper Research and Development (R & D) efforts through an organization's Marketing Intelligence/Marketing Information Systems (MIS/MKIS) can help unearth people's tastes and preferences and hence shape new products and services. This will enhance better segmentation with regards to relevant consumer personal/socio-economic variables. Product diffusion and hence frequency of purchase is often enhanced by consumer's level of awareness, perceived product quality and reliable warranty among others.

**Keywords:** Sources of Information, Consumer Preference, New Durable Electronic Goods and Kano Metropolis

## 1. Introduction

Market dynamism is created by the introduction of innovative products, which may lead to the obsolescence and exit of older ones. Song & Montoya-Weiss (2000) posit that new product development increasingly represents the focal point of competition for many firms. Prins & Verhoef (2007) indicate that new products are apparently important for the long-term success of firms, vis-a-vis technological intensive industries. Remaining relevant in industry requires the effective blending of the marketing mix elements to meet the consumer's insatiable tastes for product innovations (Kurya & Kurfi, 2010; Van Heerde, Mala & Machanda, 2003). Product innovations such as washing machines, clothes dryers, dishwashers, freezers, microwave ovens, air conditioners, electric cookers, iron, robot vacuum cleaners, refrigerators, TVs, and so on are being introduced by innovative marketers. Some of these innovative electronic devices combine two or more functions, show a list of stored items and enable the consumer access their contents, even while in transit. Adoption of new products is not just automatic, especially with diverse health concerns and health hazards attached to some products. The adoption criteria employed by consumers for new product adoption range from quality product design and packaging benefits. Others include authenticity of sales appeal, cost reduction and environmental compatibility to its packaging benefits. The World Packaging Organisation (2004) indicates that the packaging industry is well recognized for its diverse and innovative efforts reflected in product packages in terms of product protection, content preservation and ease of handling among others.

Product innovations cut across every sphere of life, and the durable electronic goods is not an exception. The Internet, for instance, has made e-commerce possible, which get people more exposed, and have unlimited access to diverse substitute ranges of products that can satisfy same need because more companies are competing for attention. Stream of authors indicate that these innovative products add value to man's life through ease of work functions, fulfilment of status symbols, and other personal needs of the consumer (Lederman, 2010; Oboreh, 2009; Perreault & McCarthy, 2000). Hence, innovative devices like the Cable TV (CATV), the modern washing machine, CD/DVD players, micro ovens, are undoubtedly key drivers to economic growth.

## 2. Statement of the Problem

According to Li & Atuahene-Gima (2002), extensive literature on product innovation exists, but most of these bother on benefits accruable to marketers from such innovations. Guerzoni (2007) buttresses this as he asserts that although significant knowledge of the technological determinants of innovation processes exists, an adequate understanding of the demand side factors is still deficient. Yet, this is paramount for as Hausman (2014) emphasize, any innovation that does not plan for adoption and diffusion is bound to fail. Hence, proper knowledge of how consumers arrive at their levels of knowledge and adoption of new products by marketers cannot be overemphasised.

### 3. Objectives of the Study

The general objective of this study is to determine the effects of innovation on consumer preference formation with respect to durable electronic goods in Kano Metropolis.

The following are the specific objectives of the study to:

1. Examine the sources of information used by consumers in their purchase decision of innovative durable electronic goods.
2. Ascertain the extent to which sources of information used by consumers affect their purchase decision of innovative durable electronic goods.

### 4. Research Questions

The following research questions are used as guide for the study.

1. What sources of information are used by consumers as means of diffusion of new electronic goods?
2. To what extent do sources of information used by consumers affect their purchase decision of innovative durable electronic goods?

### 5. Research Hypotheses

To provide additional guide for this study, the following null hypotheses have been formulated.

H<sub>0</sub>: There is no significant relationship between sources of information and consumer purchase decision for new durable electronic goods.

### 6. Scope and Limitation of the Study

The study area of this research is restricted to Kano Metropolis. The study is also limited to the information sources and features consumers seek for in their preference for the following durable electronic goods: TV, Refrigerators, DVD players and Satellite TV receivers. The conceptual issues related to innovation and durable products such as the meaning of innovation, innovation diffusion and adoption: process and rate; speeding adoption and diffusion, sources of information and impact on innovation diffusion of consumer durable electronic goods. Also reviewed are the definition, characteristics and types of durable goods. The study has only examined the effect of sources of information on new product diffusion and adoption of electronic durables with confinement to Kano. Other studies might expand their frontiers to other similar commercial cities nationwide such as North-East (Maiduguri); South West (Ibadan); the Federal Capital Territory, Abuja, etc., or a combination of these central.

## 7. Literature Review

### Meaning of innovation

Boddy (2008) define innovation as the process of taking a creative idea and turning it into a useful product, service/method of operation. Hence, innovative organizations could be inferred to have a culture which allow its staff to be involved in research and development efforts that would make for creative destruction. That is, opportunity to bring out new things, accept failures as inevitable and a source of learning rather than shame, and give reward for success.

Similarly, Robbins and Coulter (2005) indicate that innovative organizations have cultures which allow for the acceptance of ambiguity, tolerance of the impractical, low external controls and tolerance of risk. In addition, there is tolerance of conflict, focus on the end rather than the means, and an open system of focus whereby the staff are encouraged to monitor the business environment, be ready for change as it occurs and have positive feedback. This will indispensably make the organization more proactive, rather than retroactive.

### Innovation Diffusion and adoption: Process and Rate

Everett Roger's innovation diffusion and adoption model has for decades become a model for reference on organization's effort to have an understanding of how to get its product/service offerings diffuses and adopted by the target audience. Kotler and Keller (2007) have defined innovation diffusion process as "the spread of a new idea from its source of invention or creation to its ultimate users or adopters". According to Fregene (2008), diffusion is a special type of communication concerned with the spread of messages that are perceived as new ideas. The innovation adoption process is portrayed to have both psychological and sociocultural perspectives because these are significant to its success or failure (Daghfous, Petrof and Pons, 1999). While Kotler and Armstrong (1994) categorize the adoption process into five: awareness, interest, evaluation, trial and adoption, Perreault, Jr. & McCarthy (2005) conceptualize the process into six: awareness, interest, evaluation, trial,

decision and confirmation. At the adoption stage identified by Kotler and Armstrong (1994), the consumer decides to make full and regular use of the innovation. This stage is expanded into decision and confirmation in Perreault, Jr. & McCarthy's (2005) classification. The steps to the new product adoption process are similar to the problem-solving process. A distinguishing feature is that learning and promotional efforts are more prominent in the former. Therefore, marketers of product innovations often make use of different forms of advertisements to help consumers' adoption of new products, especially high purchase involvement ones like electronic durables to help reduce or eliminate purchase dissonance. At the awareness stage, pioneering advertisements are used to build primary demand. Informative advertisement at the interest stage to inform, describe and demonstrate benefits of the new product. Competitive advertisement is used to develop selective demand for a specific brand at the evaluation and trial stages. Directional retail advertisements, point-of-purchase advertisements and price deal offers are used at the decision stage. Marketers also use reminder advertisements and informative 'why' advertisements to reinforce previous promotion (Perreault & McCarthy, 2005). Disparities in value orientations and motives for adoption of new products is reflected in the innovation diffusion model classified into five: innovators (2.5%); early adopters (13.5%); early majority (34%); late majority (34%); and laggards (16%) (Swanson, 2015; Kotler & Armstrong, 1994). Schiffman and Kanuk (2003) reiterate that the rate of adoption implies how quickly it takes a new product to be accepted by those who will ultimately adopt it. Although the coloured TV took about five years to penetrate Japan, and several more years for Europe, yet it took about 12 years longer for black and white TV in Europe, and Japan as in the U.S. in contrast, the penetration levels for the compact disc players in Europe, Japan and U.S. were about even after only three years. This is a clear indication that the adoption of TV is slower than that of the compact disc players. Swanson (2015) indicate that for the Laggards for instance, who, like the innovators, do not rely on group norms and values, they probably bought their first black-and-white TV when color TV was already dominantly used.

#### **Speeding adoption and diffusion**

Hausman (2014) suggests that for an effective diffusion and adoption of innovation, there is the need for the marketer to adopt the following strategic posits: (i) understand how personality affects adoption. For instance, innovators and early adopters have important features which distinguish them from other categories: they are younger, better educated, more affluent, better connected in terms of accessibility to information; they are extrovertic in nature and willing to take risks; (ii) there is the need to understand that innovation characteristics affect adoption in terms of advantage, compatibility, complexity, trialability, and observability. (iii) there is the need to build adoption and diffusion into marketing plans with regards to product features that speed adoption, match communication to focus on innovators/early adopters, especially the latter. (iv) consider the process consumers go through in adoption of a product: awareness, interest, evaluation, trial and adoption. (v) enlist innovators and early adopters as brand ambassadors. This feat can be achieved by giving them discounts, monetary awards for sharing information with their friends, relations and so forth. Again, unique customized advertorials could be helpful to 'catch' the early adopters in the new product adoption curve. Additionally, Schiffman & Kanuk (2003) establish that intensive research efforts have been made to uncover the relative influence of impersonal sources such as advertising and editorial matter as well as interpersonal media (that is the salespeople and informal opinion leaders). Although it is worthwhile to note that consumers prefer the informal opinion leaders more than the salespersons because the informal opinion leaders are seen as more authentic, having nothing personal to gain from any new product transaction they are encouraged to engage in.

#### **Sources of Information and Impact on Innovation Diffusion of Consumer Durables**

Consumer durable goods (also referred to as hard goods or mass-market heavy goods) are goods which have longer life-span. They are goods which do not quickly wear out. They yield services or utility over time rather than being completely used up when used once. They are hard goods because they cannot be used up at once and are typically characterized by long periods between successive purchases. Durable goods made for the consumer are called consumer durables. In the world of consumer goods, three years or more is considered a long lifespan. Consumer durables are of various types. They include furniture, consumer electronics such as the microwave ovens, refrigerators, televisions, air conditioners and washing machines. Others include automobiles and mobile phones. These items are considered durable because they are not quickly destroyed by regular use. The average life expectancies of durable goods vary by product and style: a gas range is about 19 years, while an electric range is usable for approximately 17 years. The emphasis on durable goods and consumer durables in economic statistics is founded in purchasing behavior. While companies tend to replace old capital equipment when profits are high, consumers tend to replace more major household items when consumer confidence and household incomes are high (Investor Glossary, 2011; Consumer Durables Marketing, 2010; Technology Independent Expertise, 2012).

The rapidity of innovation spread through a market to a great extent depends on communications between the marketer and consumers, as well as word-of-mouth communications that often occur among consumers. As a social system, such interactions will not be far-fetched among friends and relations. Intensive research efforts have been made to uncover the relative influence of impersonal sources such as advertising and

editorial matter, as well as interpersonal media – salespeople and informal opinion leaders (Schiffman & Kanuk, 2003). Impersonal mass-media sources tend to be most valuable for creating initial product awareness; even though this wanes, while the relative importance of interpersonal sources such as friends increases, yet its indispensability as a first initial prompter of product awareness and purchase behaviour cannot be overemphasised. Zikmund & D'Amico (1996) identify seven steps to the Hierarchy of Communication as: (i) Brand ignorance (ii) Awareness (iii) Knowledge (iv) Liking (v) Preference (vi) Conviction and (vii) Purchase. According to them, organisations can use promotions to get consumers who are on the conviction step to a purchase behaviour. Furthermore, they reiterate that promotions of infrequently purchased durable goods might be used to advise the buyer to tell a friend about the benefits inherent in the purchase of the firm's products. Consequently, impersonal sources like TV advertorials can be used to spur personal sources.

Organisations develop new channels of communication to inform consumers of innovative products and services. There are interactive marketing messages, in which the consumer becomes an important part of the communication rather than just a 'passive' message recipient. Major automobile manufacturers like Ford Motor Company and the General Motors, have used floppy disks or CD-ROMS to promote their products (Schiffman & Kanuk, 2003). Knowledge of the adoption process is important as it provides a framework for determining which types of information sources consumers find most important at specific decision stages. Dwyer & Tanner, (2002) identify three types of product knowledge that consumers may possess and which they can use to interpret new information and make purchase decisions. These are knowledge about product attributes, the consequences of product usage and values the product helps consumers achieve or satisfy. An understanding of the consumer's product knowledge levels enables the marketer to know factors used by consumers to rate products as new and helps in the development of effective marketing strategies. Hence, a successful organisation is one that recognises innovation from the consumer's knowledge perspective, rather than its own laudable technological prowess.

According to Schiffman & Kanuk (2003), message credibility determines the extent to which the message is much likely to be believed and result to purchase behaviour. Informal sources such as word-of-mouth communications by friends, neighbours, relatives, consumer reports and editorials have a strong positive influence on a receiver's behaviour because these sources are believed to have nothing beneficial from a product transaction that they recommend. In contrast, salesmen who are viewed as desperately desiring a sale are viewed with scepticism and regarded as unreliable sources. Organisations can therefore seek advertorials and publicity efforts from newspapers and magazines what the target audience considers credible and the knowledge of the companies' credibility.

Schiffman & Kanuk (2003), among numerous others, observed that perceived corporate credibility had a strong impact on attitudes towards the advertised brand. The reputation of the medium that carries the advertisement enhances the credibility of the advertiser. The image of a prestige magazine confers added status on the products advertised within. Consumers tend to regard advertising they see in special-interest magazines with more credibility than those they note in general-interest magazines. This is because of the belief that specialization in an area implies knowledge and expertise. Consequently, marketers spend huge amounts on product preannouncements to advantage. Product preannouncements should be done with caution as it results to certain costs when not effective.

Longe, Boateng, Longe, & Olatubosun, (2010) identify the perceived ease of use and perceived usefulness of a product as two fundamental and influential constructs in decisions to use information technology. According to them, perceived usefulness has stronger impact. This is a logical reasoning in that consumers look for an innovation's potential to alleviate a problem, make a job easier or more efficient. Similarly, Cateora & Graham (2005) have enumerated five characteristics of innovation which can assist in determining the rate of acceptance or resistance of the market to a product. These are: the value derivable from the product, how compatible the product is with established values and norms, how easy it is to use, (e.g. ease of opening, closing); economic and social risks involved, ease of communicating product benefits, (e.g. through advertisement demonstrations). The use of advertisements to speed up consumer's acceptance of their new products cannot be overemphasised. Warranties/guarantees, free samples, could also be used to reduce fear of losing financial investments in the products or some social prestige and other dissonance factors.

The perceived risk associated with a new product is another factor that has been identified as a critical determinant of consumer willingness to purchase a new product. The behavioural decision theory suggests that a perceived risk contributes substantially to the decision making process (Puto, Patton & King 1985; Hirunyawipada & Paswan, 2006). Social risk and performance risk impacts the adoption of new products. The outcome is that consumers pay attention to the advice of opinion leaders in their social network when purchasing new products. Subsequently, the adoption of the new product would substantially increase due to word-of-mouth. To avoid risks of failure and subsequent loss, Grewal, Gotlieb & Marmorstein (1994) suggest that organisations require an understanding of the consumer's decision to adopt new products under risky condition. It is therefore logical to infer that perceived risk is a critical determinant in a consumer's willingness to adopt

new products, and tends to be more pronounced in high-technology consumer products. Robinson (2009) suggests that the success of an innovation depends on how well it evolves to meet the needs of individuals in a social system who are more and more demanding and risk-averse. Organisations therefore need to co-opt consumers as partners in progress to discover likely risks consumers envisage and see how such can be alleviated through innovative products.

Product preannouncement can influence consumer's purchase intention. Therefore, marketers make use of preannouncements to capture consumer's mind for a more favourable market position and to achieve higher profits than their competitors. It goes without saying that advertising has both an informative and persuasive role, and in this regard, can influence consumer's perception of a product (Adeleye, 1998).

### **Durable Goods: Definition, Characteristics and Types**

In economic terms, goods have economic utility in that they are able to satisfy consumer needs and wants. Zikmund & D'Amico (1996) define a durable good as a physical, tangible item that functions over an extended period, for instance, refrigerators, TVs, automobiles are used many times, for upward of three or more years. According to Dave, Mistri & Patel (2013), "consumer goods like washing machines, motorcars, TV sets, audio-video systems, etc, which yield services or utility over time rather than being completely used up at the moment of consumption can be termed as the consumer durables." Kotler and Keller (2006) reiterate that durability is a measure of the product's expected operating life under natural or stressful conditions. As they emphasized, buyers are more willing to pay more for vehicles and kitchen appliances. In the same vein, the Investor Glossary (2011) indicate that the importance of consumer durables to macroeconomic statistics stems from consumers' spending behaviour. Hence, consumers tend to buy more consumer durables, such as automobiles and major household appliances, when consumer confidence and household incomes are high. This tends to make producers of consumer durables cyclical companies. Similarly, Perreault & McCarthy (2002) posit that a good is a tangible item (as distinct from services) and could be stored for a long time in a warehouse before being sold. A TV is a typical example. Producing the right product, when, where, and how desired by the consumer invariably is a challenge especially of durable goods that involve much cost. Therefore, as Miles & Green (2008) emphasize, marketers require research to unearth the right cues which would help in the design of goods and services that are valued as beneficial by the consumers.

According to Dasar, Hundekar & Maradi (2013), durable goods are characterised by tangibility or described as hard goods. They are longer lasting and of more worth compared to non durables. Durable goods have purchasing timings such as all time, post harvest seasons, festival seasons, marriage ceremonies and other occasions. Durable goods are highly priced, and not frequently purchased. Consumers of durable goods believe in quality control. For instance, in India, adherence to strict quality stipulations of the Indian Standard Organization (ISO) and the ISI mark is considered as a symbol of quality of the manufactured products. Similarly, the Standard Organization of Nigeria (SON) gives strict quality standards which manufacturers are expected to abide by. Consumers of durable goods are profoundly influenced by the advertisements of manufactured products in general and consumer durables in particular. Brand consciousness among consumers of durable products is an important characteristic feature because consumers prefer high valued consumer durables of well established brands. Dasar, Hundekar & Maradi (2013) describe consumer durables as high valued, while Dave, Mistri & Patel (2013) indicate that most consumer goods are durable to some extent, relatively expensive and technologically sophisticated goods. This demands consumers' high involvement at the time of purchase. As such, purchasers of majority of consumers of durable goods take experts opinion before purchasing such durable products (Dasar, Hundekar & Maradi, 2013). This in essence result to less complaints or dissatisfactions after purchase, and by inference, cognitive dissonance is reduced to the barest minimum.

According to Kotler (2003), products can be classified in terms of durability and tangibility. Non durable goods are tangible goods consumed in one or few uses. They come under the consumption demand of goods in that they are quickly consumed and frequently purchased such as cleaning materials like soap, consumables like drinks, food, fuel, office supplies, packaging and containers, paper and paper products, personal products, rubber, plastics, textiles, clothing and footwear. These types of products should be available in many locations, with small mark up, heavy advertisements to induce trial and build preference. Durable (hard) goods are tangible goods that are not consumed once, but after several uncountable uses such as household goods such as home appliances like refrigerators, consumer electronics, and furniture. Others include cars, bricks, mobile phones and machine tools. Durable goods do not wear out quickly, but rather yields utility over time. They come under the investment category of goods since they are not often purchased and last for long time. As such, they are often characterized by long periods between successive purchases. Their nature demands more personal selling and service, higher margin and more seller guarantees. This is necessary to build up confidence, reduce dissonance and establish loyalty. Services are intangible, inseparable, variable and perishable products. This category of goods requires more quality control, supplier credibility and adaptability, e.g. haircuts, repairs.

To attain strong position as manufacturers/marketers of consumer electronics, there is the need for the

manufacturers of durable goods (hard/mass-market heavy products) to engage in innovative research. These will make it possible for consumers to get what they expect, even more because the research efforts would enable the organization find out the actual tastes and preferences of consumers, which are they used to bring about client-centric products, using latest technological developments. This will go a long way to ensure that durable goods live up to expectation (that is, they do not easily wear out with regular use). Furthermore, organizations can use warranties/guarantees to establish confidence, reduce cognitive dissonance, and increase brand loyalty.

### 8. Research Methodology

Survey design, using the multistage sampling technique was used to select the sample size from the population. The study population is Kano Metropolis, (which represents the commercial nerve centre of northern Nigeria), made up of 6 local government areas, plus two adjoining local government areas, making 8 in all. Therefore, the population of this study was made up of all consumers that purchased new durable electronic products as TVs, refrigerators, DVD players and satellite receivers, and are either working or resident in the selected Local Government Areas. Furthermore, the sample used for the study are those literate enough to complete the questionnaire. The population size of the respective LGAs, as given by the National Population Commission (2006), are as follows: Tarauni – 221,367, Fagge – 198,828, Nassarawa – 596,669, Gwale – 362,059, Dala – 418,777 and Kano Municipal – 365,525, Ungogo - 369657 and Kumbotso – 295,979. The multistage sampling technique is used to select the sample size and affect the process of administration and collection of the questionnaire. The instrument of data collection was structured questionnaire. Firstly, the local governments were geographically stratified, using the geographical stratification given by the National Population Commission (2006) viz: Tarauni, Fagge, Nassarawa, Gwale, Dala, Kano Municipal, Ungogo and Kumbotso. Secondly, the determination of the number of respondents chosen from each stratum (local government) was done using proportional sampling technique. Thirdly, the convenience sampling technique was adopted to select the required respondents from each stratum for ease of administration and collection of the administered research instrument. The administered questionnaires were personally administered and retrieved with the assistance of few social research experts.

The research questions and hypotheses were used to draft the questions in the instrument to keep the content and focus of the research in view. The research instrument designed for this study was subjected to both face and content validity. Hence, the instrument was screened and critically examined by social science experts in the field of behavioural and social sciences at the Bayero University Kano, as well as the Federal College of Education, Kano. The comments and suggestions from the pilot study conducted were incorporated into the construction of the final instrument to enhance the reliability of the instrument.

**Table 8. 1: Determination of Sample Size**

Local Government Area	LGA Population (X)	Sample Size {X/YxN }
Tarauni	221,367	39
Fagge	198,828	35
Nassarawa	596,669	106
Gwale	362,059	64
Dala	418,777	74
Kano Municipal	365,525	65
Ungogo	369,657	65
Kumbotso	295,979	52

*Source: Data Compiled by the Researcher, 2015*

*Key: X =Stratum (LGA) Population; Y = Population of Study Area = 2,828,861;*

*N = Target Sample Size = 500*

The completed copies of the questionnaire were retrieved from the respondents, assembled and edited. The editing involved checking for completeness of the information supplied, legibility, comprehensibility and consistency. Consequently, the usable copies of the questionnaire were serially numbered and numerically coded for computer processing. Both descriptive and inferential statistics were used to accomplish data analysis. Specifically, the Pearson Correlation Coefficient (r), and the Linear Regression were the statistical techniques employed to test the research hypotheses. The statistical tests were at 95 per cent confidence level. Descriptive statistics such as the percentages, frequency, were also used. The Statistical Package for Social Scientists (SPSSV.16) was used to analyse the data collected for the study.

### 9. Discussion of Findings

A total of 500 copies of the questionnaire were distributed. Only 443 copies (representing 88.6%) were returned, while 57 or 11.4% were not returned. Out of the number returned, 413 (82.6%) were found usable for analysis, while 30 (6%) were not usable

**Table 9.1 Sources of Information Consumers Use for the Purchase of New Durable Electronic Goods**

The speed of innovation diffusion is often a function of effective communication among others. Hence, it was found pertinent to ascertain the sources of information consumers use in their purchase of new durable electronic goods. The sources of information examined were nine in all. Therefore, the respondents were asked to indicate the extent to which each of the nine variables examined influenced their purchase decision for new durable electronic goods. Their responses were scored on a 5 point Likert-type rating scale ranging from 5 for “to a very large extent” to 1 for “to a very little extent. Their responses were summarized using weighted score (ws) and subsequently ranked. The summary of their responses is presented on Table 4.3.

**Table 9.1: Respondent’s Information Source in Relation to Preference for New Durable Electronic Goods**

Source of information	Effect of information source on purchase decision for new electronic goods						Rank
	To a very large extent	To a large extent	Not sure	To a little extent	To a very little extent	Weighted score (ws)	
Advertisements on TV	144	98	47	55	69	1432	1 <sup>st</sup>
Advertisements on Radio	82	65	74	78	114	1162	4 <sup>th</sup>
Advertisements on Billboards	56	58	99	83	117	1092	7 <sup>th</sup>
Advertisements in magazines	64	78	84	80	107	1151	5 <sup>th</sup>
Suggestions by friends/relations	83	94	71	81	84	1250	2 <sup>nd</sup>
Suggestions by salesmen	44	64	97	87	121	1062	8 <sup>th</sup>
Handbills	36	61	103	88	125	1034	9 <sup>th</sup>
Trade shows/fares/exhibitions	58	85	75	92	103	1142	6 <sup>th</sup>
Special offers (e.g. trade coupons, prize discounts, raffle draws, etc.)	74	89	70	63	117	1179	3 <sup>rd</sup>

N= 413

Source: Field Survey (2015)

Analysis of the above table has revealed that Advertisements on TV is ranked 1<sup>st</sup>, with ws = 1432. Suggestions by friends/relations is ranked 2<sup>nd</sup> with ws = 1250. The next in rank is Special offers (e.g. trade coupons, prize discounts, raffle draws, etc) with ws = 1179. The last in rank remains Handbills, with ws = 1034. The results are corroborated by the results of the standard score (Z-score) analysis. It specifically reveals that advertisement by TV is proven as the most important source of information that prompt preference formation for new durable electronic goods. The next prominent source of information is suggestions by friends/relations. Special offers also have some great impact on consumers, along with advertisements on radio. Other sources that do not have much influence are advertisements in magazines, trade shows/fares/exhibitions, advertisements on billboards, suggestions by salesmen and handbills. **Relationship between Sources of Information and Consumer Preference for New Durable Electronic Goods.**

It was considered pertinent to assess the relationship between sources of information and consumers ‘preference for electronic durable goods. Hence, **Hypothesis 3** which states that “there is no significant relationship between sources of information and consumer preference for new durable electronic goods” was tested using Pearson Correlation Coefficient and Linear Regression. The Pearson correlation coefficient result is presented on table Tables 9.2 for the detailed computer generated output of correlation coefficient and linear regression).

**Table 9.2: Test of Statistical Relationship between Sources of Information and Respondents’ Preference for New Durable Electronic Goods**

Variable	Correlation coefficient (r)	Significant level	Comment
Sources of information vs index of reason for change	0.600	0.000	S

Source: Field Survey (2015)

S= significant at  $P < 0.01$

The result of the test of Hypothesis 3 based on Pearson Correlation  $r = 0.600$ ,  $df = 1$  which is statistically significant at  $P < 0.01$ . The result shows that there is a high significant relationship between sources of information and consumer preference for new durable electronic goods. This suggests that consumers’ preference for new durable electronic goods is associated with the sources of information used. The result is corroborated with linear regression. The coefficient of determination  $R^2 = 0.359$ . This shows that sources of information explain 35.9% of the variation in index of reason for change. Thus, hypothesis 3 is not supported. The researcher sought to examine the effects of innovation on consumer preference for selected electronic goods such as TV, Refrigerator, DVD players and Satellite Receivers. Iwu’s (2010) assertion that a firm’s offering must be communicated to the consumer is supported by the findings of this study. Chen (2012) indicates that consumers require information about product choices. The study revealed that the prominent means by which the consumers source information for their purchase of new durable electronic goods was “Advertising by TV”. This is logical as literature indicates that impersonal mass-media sources tend to be most valuable for creating initial product awareness, and could also be used to prompt purchase behaviour. According to Chen (2012), consumers often face two types of information problems: limited information about a product’s existence and quality. According to him, consumers learn about product quality through experience, and it is assumed that product

quality can be fully learned after the first try. He argues further that advertising has two types of informative effects: signalling product quality and the probability of consumer awareness of the product. Zikmund & D'Amico (1996) emphasise that for infrequently purchased durable goods, marketers might use promotions to advise the buyer to tell a friend about the purchase and that the firm also vends other fine products. According to Zikmund & D'Amico, target customers who are on the conviction step of the 'Hierarchy of Communication Model' can be spurred to purchase behaviour. Promotions/advertisement messages such as: 'now is the time to buy'; 'discounted rates now available: two-for-one coupon – offer lasts one month after this advertisement', etc., can be used to rouse consumers to buy. Ratchford, Talukdar & Lee (2001) indicate that TV advertisements express feelings. According to Dasar, Hunderkar and Maradi (2013), a very positive impact of advertising is found on the consumer durables market. Similarly, Wilmshurst & Mackay (1999) indicate that advertisements by TV have the added advantage of the use of imageries which have much impact on an individual's mental reasoning. For instance, the TV advertisement may portray the best answer for a consumer's well-defined problem which might be "the most economic multipurpose refrigerator". In addition, they reiterate that TV advertorial is recognized for its ability to help move consumers through a series of steps which gradually build up the necessary conditions for a sale (the 'Hierarchy of Effects Approach' e.g. DAGMAR – Defining Advertising Goals for Measured Advertising Results). Thus, advertisements could serve as primary motivating force for new product purchase as well as the means through which impersonal channels such as suggestions by friends could be established. In addition, Iwu asserts that a "heavy dose" of advertising promotions is necessary for a firm to stay alive which can take various forms, namely: offering of guarantees and discounts.

Another plausible reason why "Advertising by TV" is ranked first is premised on the issue of 'perceived risk'. According to Gronhaug (1972), opinion leaders tend to reduce perceived risk for their successors; they receive more information especially from impersonal sources and make use of the mass media to a larger scale. This agrees with Ha's (2002) assertion that pre-purchase information is indispensable because it reduces consumer risk, increases brand comprehension, and helps the consumer make a brand choice. Gronhaug (1972) reiterates that since a correlation exists between low perceived risk and opinion leadership, it is reasonable to assume that persons who experience low perceived risk will exhibit approximately the same information behaviour as opinion leaders. It is therefore logical to infer that the respondents of this study have low perceived risk since "Advertising by TV" is ranked first. Therefore, going by the assertions of Zikmund & D'Amico (1996), and Ha (2002), pre-purchase information, especially through TV advertisements indispensably spurs, as well as buttress the strength of opinion leaders.

The study findings further reveal that "Suggestions by friends" was ranked second. The effect of suggestions by friends/relations is also buttressed in the relevant literature. Schiffman & Kanuk (2003), among others recognise direct experience reported by friends, relatives, colleagues, opinion leaders and other acquaintances such as the media as the most effective means for the diffusion of the awareness of the existence of a novel product. It becomes imperative for marketers to identify and take good advantage of opinion leaders in their TV advertorials for optimum results. Zikmund & D'Amico (1996) as earlier mentioned emphasise the indispensable place of opinion leaders (telling a friend), especially in product promotions of infrequently purchased durable goods.

Given the current state of the nation's economy, the third place ranking of special offers, coupons, prizes, discounts, and raffle draws is logically credible, and supported by literature. Pandey & Pandey (2012) indicate that Indian consumers are price sensitive and seek for expert opinion in their selection of TVs. Advertisements on radio were ranked fourth. Most people love to keep abreast of current news. The radio is the most common means of reaching out to the grass roots compared to newspapers and magazines. The ranking of magazines as fifth may not be unconnected with issue of cost, and the fact that it is not easily accessible to all and sundry. Its price is rather on the high side relative to the average Nigerian's basic income. It is rational for people to prefer information through the TV, radio, or even at no cost at all by word-of-mouth, which is even more reliable, than spending money to purchase magazines. Apparently, only those who have the flair for fashion, professionalism, and have extra disposable income would normally go for magazines, and of course if they believe that such newsprint is credible. The last in rank was handbills. This is the least surprising as most often, people are sceptical at collecting handbills. Some of these handbills might not even be legible, or they may contain less information than expected. Worst still, most of these handbills often end up in trash cans!

The diffusion of new durable electronic goods is greatly enhanced by TV advertorials, suggestions by friends/relations and price discounts. Other sources of information used by consumers in the purchase of durable electronic products in the descending order are advertisements on radio, advertisements in magazines, trade shows, advertisements on billboards, suggestions by salesmen and handbills.

## 10. Conclusion and Recommendation

On the basis of the research findings, the study concludes that sources of information used by consumers affect the diffusion, hence adoption of new durable electronic goods of TV, refrigerator, DVD players, and satellite



receivers in the dimensions of sources of information, and product features. DVDs are most frequently purchased. Advertisements by TV, suggestions by friends/relation and special offers to a large extent help consumers in their purchase decision for new durable electronic goods. Based on the research findings and conclusions, the researcher has made the following recommendations:

- (i) Proper Research and Development (R & D) efforts through an organization's Marketing Intelligence/Marketing Information Systems (MIS/MKIS) can help unearth people's tastes and preferences and hence shape new products and services. This will enhance better segmentation with regards to relevant consumer personal/socio-economic variables.
- (ii) Product diffusion and hence frequency of purchase is often enhanced by consumer's level of awareness, perceived product quality and reliable warranty among others. It is thus recommended that organizations should adopt a holistic firm-customer partnership e.g. customer feedback, direct interviews or survey of customers' opinions through a research of this nature; in-house test-marketing can result in rapid creation of augmented products desired by consumers. Furthermore, reliable product warranties can go a long way to reduce/remove cognitive dissonance and establish brand loyalty and frequency of purchase.
- (iii) Communication and promotion plans are considered appropriate and beneficial for rapid diffusion and long-run profitability of organizations. These should include advertising promotion messages which offer free-trial of new products to consumers, convey consumer-perceived benefits and possible discounts. The use of opinion leaders in TV advertorials cannot be overemphasized. Advertisement programmes should be sufficiently interesting and informative to reduce perceived social and psychological risks. Invariably, customized advertising can equally evolve.

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