CONSUMER ATTITUDE TOWARDS ANALOGUE TO DIGITAL MIGRATION OF TELEVISION BROADCASTING TECHNOLOGIES IN NAIROBI COUNTY

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DECLARATION

This research project is my original work and has not been presented for award of any degree in any university.

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This research project has been submitted for examination with my approval as the University Supervisor

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DEDICATION

For the support, belief and encouragements given throughout this course and academic journey; I would like to thank my sisters Nancy, Irene, Beryl, Samora and Mother Mrs. Alice Tabu for the never ending faith, hope and persistence. I am forever indebted. Thank you

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LIST OF ABBREVIATIONS

ASO	Analogue Switch Off
ATU	African Telecommunication Union
COFEK	Consumers Federation of Kenya
CCK	Communications Commission of Kenya
DTB	Digital Television Broadcasting
DTC	Digital Transition Committee
DTT	Digital Terrestrial Television
DVB - T2	Digital Video Broadcasting Technologies, Generation 2
EAC	East Africa Community
FTA	Free To Air
GDP	Gross Domestic Product
GE89	Geneva 1989
HDTV	High Definition Television
ICT	Information Communications and Technology
IDTV	Integrated Digital Television
ITU	International Telecommunications Union
MUX	Multiplex
NHIF	National Hospital Insurance Fund
PVR	Personal Video Recorder
RRC	Regional Radio Conference
RURA	Rwanda Utilities Regulation Authority
SDTV	Standard Definition Television
STB	Set Top Box
SPSS	Statistics Package for Social Scientists
TV	Television
UHF	Ultra High Frequency
USA	United States of America
VAT	Value Added Tax
VHF	Very High Frequency

ABSTRACT

This study was conducted to determine consumer attitude towards analogue to digital migration of television broadcasting technologies. To achieve this, primary data was collected using structured questionnaires; the questionnaires were administered to (10) respondents per stratum comprising of Kenyan male and female adults who were accessed in households within the strata through door to door, drop and pick method. Strata comprised of constituencies within Nairobi County which were (8) as per the 2009 constituency geographical divisions - Kasarani, Kamukunji, Dagoretti, Westlands, Embakassi, Starehe, Langata and Makadara. Data was analyzed using descriptive statistics; this was presented in form of tables - cross tabulations, frequencies and percentages. Pearson correlation coefficients and matrices were conducted to test the correlation among variables and demographics with reference to significance. The study found that respondents were aware of migration from analogue to digital television technology and also demonstrated that respondents had a higher favourability towards attributes that digital technology has over analogue technology however most respondents indicated that they were being held back by constraints such as affordability and implementation. The researcher recommended that similar studies should be carried out in other counties and consumers need to be provided with more information about digital technology. Best practices should also be emulated from countries that have switched off analogue technology in the region.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Digital migration process occurs when analogue services are transferred to digital platforms and then analogue services are switched off. The road to digital migration began in early 2000 when a number of countries from International Telecommunications Union (ITU) Regions 1 & 3 (Europe, Africa, Middle East and others) expressed interest to introduce digital broadcasting in Very High Frequency (VHF) and Ultra High Frequency (UHF) broadcasting bands that were at that time used for analogue television (TV) broadcasting; purpose of this was to enhance efficient utilization of the already scarce frequency resource inorder to accommodate more advanced forms of broadcasting (CCK Information Paper, 2013). Migration to Digital Television Broadcasting (DTB) is a Government initiative resulting from the decision made at the Regional Radio Conference of 2006 (RRC - 06) in Geneva - Switzerland. The decision required countries in the RRC planning area to migrate from Analogue to Digital Terrestrial Television (DTT) broadcasting technologies by 17th June 2015. Kenya being one of the members and by virtue of the agreement being treaty material, provisions for end of transition period cannot be changed unless by a similar competent conference convened as per the provisions of the ITU constitution as stipulated in its Article 11.1.

In The USA the government set aside $990 million approximately Kshs. 84 billion to help viewers purchase digital set top boxes and also engaged in massive consumer campaigns. In Australia the Government established a household assistance scheme which provided eligible households with a set top box and full installation at no extra cost. In countries such as Sweden and Germany financial aid was given through social services in which set top boxes were distributed to low income families who relied on the terrestrial platform for television access (Mackay, 2007). Hai, P.N., (2013) points that in Africa digital migration progress has remained relatively slow with Mauritius being the only country in Africa to complete analogue switch off (ASO). Within the EAC region, two countries namely Tanzania and Rwanda successfully commenced

ASO on 31st December 2012 and 31st January 2014 respectfully. Tanzania has so far switched off eight major regions in its first phase with the second phase planned to commence in mid-2014 (Beal, 2013). Kenya's ASO has been interrupted a number of times by the High Court due to pending court case involving the Government and Media Owners Association but even without the interruptions, actions of Consumer Federation of Kenya (COFEK) and the outcome after recent ASO shows consumers are not yet prepared for the analogue switch off.

Attitude research has been popular beginning the 1990's. Wicker (1969) posits that theorists have believed and seen a real connection between attitudes and behaviour. This study will be guided by attitude theory of tricomponent attitude model in an attempt to determine consumer attitude towards analogue to digital migration of television broadcasting technologies in Nairobi County. Tricomponent Attitude Model has three components namely; cognitive, affective and conative component.

1.1.1 Concept of Consumer Attitude

Attitude is a learned predisposition to behave in a consistently favourable or unfavourable way with respect to a given object (Schiffman *et al.*, 2010). For attitude to form an individual goes through the steps of responding to an entity on an affective, behavioural change and cognitive level known as ABC mode (Harris, 2009). Consumer researchers assess attitudes by asking questions or making inferences from behaviour. The word 'object' in attitude object should be interpreted broadly to include specific consumption or marketing related concepts such as product, product category, brand, service, possessions, product use, people, advertisement, internet site, price, medium, retailer, causes or issues (Schiffman *et al.*, 2010).

Eaton and Visser (2008) define attitude as general evaluations that people hold regarding a particular entity such as an object, an issue or a person. According to Kotler and Armstrong (2004) attitude is a person's consistently favourable or unfavourable evaluations, feelings and tendencies towards an object or idea. The importance of the concept of consumer attitude is evident from several studies. Local studies by Chaudhary (1993), Chepyegon (1996), Kong'ong'o (2000), Thiong'o (2007) and Ochiel (2012) point out that an understanding of consumer attitude is

important in that attitude of an individual towards an object helps in predicting behaviour thus enabling a consumer to have a basis for expressing values, applying standards and frames of references that allows for organization and explanation of the world around them. The more favourable a consumer's attitude towards a product is, the higher the usage rate and vice versa (Kibera and Waruinge, 1998).

1.1.2 Analogue versus Digital Broadcasting

Television and radio signals have been broadcasted on an analogue platform since their inception, this requires a large amount of bandwidth to transmit both picture and sound information thus the main reason for the world's migration to Digital Terrestial Television (DTV) broadcast is to release valuable spectrum which can be used for wireless, public safety and other services. It is a requirement that all countries migrate to digital technologies by June 2015 according to an international agreement reached in Geneva in 2006 - East Africa states agreed upon a target date of December 2012 (Beal, 2013). Analogue broadcasting uses analogue signals throughout its broadcasting chain (RURA, 2008). Each programme being broadcasted in analogue format is assigned a frequency channel making it the responsibility of the broadcaster to distribute signals to be transmitted to all transmission sites as well as operating/managing transmitters in all areas the programme has to cover hence a TV station broadcasting three programmes needs three separate frequency channels. Digital broadcasting on the other hand uses digital signals in its broadcasting chain; the different signals to be transmitted are combined with identifiers so that several programmes can use the same frequency channel as is the case for mobile telephone.

1.1.3 Nairobi County

Nairobi County is one of the 47 Counties in Kenya and has a population of 3,138,369 covering 684 square kilometres. The County consists of seventeen parliamentary constituencies (2009 Census report). This study is based in Nairobi County because Digital Transition Committee (DTC) had earlier set the date for analogue switch off to be 13th December, 2012 in Nairobi and its environs followed by other major towns in March next year and final switch off in all parts of the country be finalised in June 2014 (www.digitalkenya.go.ke). This however was not effected despite use of various

strategies to encourage consumers to migrate to digital TV broadcasting, in addition COFEK went to court in December 2012 to restrain the Government and Communications Commission of Kenya, (CCK) now Communications Authority of Kenya from going ahead with the plan to switch off analogue TV broadcasting on 31st December citing the following reasons; it was ill timed, disadvantaged consumers, unavailability and unaffordability of the Set Top Boxes (STBs). This was also compounded by withdrawal of the local TV channels from the digital platform by some of the existing local analog TV stations and further pushing of switch off deadline to 30th September, 2014 by the High Court (The Standard, 2014).

Historically broadcasting industry in Kenya has evolved with each analogue TV broadcaster having to roll out its own transmission infrastructure which is a very expensive affair. According to Infotrack's digital migration survey report commissioned by COFEK almost half of Nairobi County households will not watch TV if the government switches off analogue signals. This is because 48% of Nairobi residents mostly those earning low income were yet to acquire set top boxes. An estimated 1.2 Million households in Nairobi County and its environs have analogue TV sets with more than 566,000 of these households having access to digital channels via the various modes of transmission leaving slightly over 700,000 in need of digital migration before ASO deadline (Infotrack Digital Migration Survey Report, 2013)

1.2 Research problem

Consumer attitudes have been known to affect consumer purchase behaviour (Onkvisit & Shaw, 2004). Attitude is considered to be highly correlated with one's intention which in turn is a reasonable predictor of behavior therefore it is important that marketers understand consumer attitude towards an attitude object inorder to effectively develop appropriate marketing strategies. If a consumer's attitude is favourable towards an attitude object then the purchase is more likely and vice versa (Ochiel, 2012). Migration to digital TV broadcasting technologies will allow greater efficiency in the use of the country's electromagnetic spectrum thus creating opportunities to free up spectrum for other purposes such as wireless and public safety uses (Beal 2013). Available literature shows that even in developed economies, TV digitization process does not take place smoothly even with massive expenditures on

awareness campaigns (Mackay, 2007). Majority of Nairobi County residents are yet to buy STB's as demonstrated during the first attempt to switch off analogue technology. Reasons cited by COFEK included; the idea being ill timed, disadvantaging consumers and unavailability/unaffordability of the Set Top Boxes (STBs). This study was interested in finding out if other than reasons cited by COFEK consumer attitude is amongst reasons causing consumers not to migrate to digital technology.

Local attitude studies by Ochiel (2012) on attitudes of Parastatal employees, Kuria (2012) on truck tyre customers in Nairobi and Thiong'o (2007) on influence of commercial sponsorships on consumer attitudes towards brands in Nairobi only focussed on other industries and not technology related areas per se whereas those that have focussed on digital technology have been non - attitude related. Infotrak Research undertook a survey on digital migration in December, 2013 and found out that Nairobi County residents were willing to shift to digital technology but needed more time, the survey was applied research. Githinji (2013) conducted a study on challenges and accessibility issues faced by residents of Makadara constituency as a result of digital migration and found out that unavailability/unaffordability are the major challenges facing residents of Makadara constituency. This study was only limited to Makadara constituency. None of these studies however focussed on consumer attitude towards digital technologies in Nairobi County and specifically awareness, knowledge and intention to buy or migrate to digital technology. Githinji (2013) only focussed on one constituency in Nairobi County. Given the gap existing in scope and area of consumer attitude, this study sought to provide answers to the following question. What is the consumer attitude towards analogue to digital migration of TV broadcasting technologies?

1.3 Objectives of the study

The General objective of the study was to determine consumer attitude towards analogue to digital migration of television broadcasting technologies. Specific objectives were;

1. To establish consumer beliefs towards analogue to digital migration of television broadcasting technologies.

2. To identify consumer feelings towards analogue to digital migration of television broadcasting technologies.

3. To determine consumer intention to buy set top box or integrated television to allow for analogue to digital migration of television broadcasting technologies.

1.4 Value of the study

The results of this study are expected to contribute to theory building, policy issues and marketing practice. The study will add to the existing knowledge on attitude and specifically consumer attitude towards products or services that are technology related. It will also assist marketing managers during new product development, segmentation of markets, brand repositioning or advertisement of products and services in that they can come up with innovative ways that suit consumers attitudes regarding their products and services.

The study will benefit future researchers as the findings will provide useful information that can be used to advance similar studies or act as a source of reference or gap identification for researchers who want to conduct consumer attitude studies in other sectors. Investors and businessmen can get insights on the findings especially in view of consumer attitudes towards digital migration and help them in positioning their products against the competition. These insights can also be extended to aid in other business activities.

Findings of the study are also important to the government and policy makers including various commissions formed to fast track the digital migration process as well as other bodies either local or international that are advocating for digital migration switch before the deadline day.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed the theory guiding this study as well as importance of consumer attitudes, characteristics of attitude, role of attitude, models of attitude, measurement techniques of attitude, consumer decision making process and diffusion of innovation among other digital technology and migration related literature.

2.2 Theoretical Review

In the theoretical review the researcher discussed theories of attitude as well as models related to attitude.

2.2.1 Tri Component Attitude Model

This study was guided by the theory of Tricomponent attitude model. According to the tricomponent attitude model attitude consists of three major components; a cognitive component, an affective component and a conative component. The first part of the tricomponent attitude model consists of a person's cognitions that is the knowledge and perceptions that are acquired by a combination of direct experience with the attitude object and related information from various sources. This knowledge and resulting perceptions commonly take the form of beliefs that is, the consumer believes that the attitude object possesses various attributes and that specific behaviour will lead to specific outcomes.

A consumer's emotions or feelings about a particular product or brand constitute the affective component of an attitude. These emotions and feelings are frequently treated by consumer researchers as primarily evaluative in nature that is, they capture an individual's direct or global assessment of the attitude object which translates to the extent to which the individual rates the attitude object as favourable or unfavourable, good or bad and so on (Assael, 2004). The conative component is the final component

of the tricomponent attitude model; in marketing and consumer research, it is usually treated as an expression of the consumer's intention to buy (Schiffman and Kanuk, 2010). Conative component reflects behavioural tendencies towards the attitude object, these tendencies may include; trial or purchases in respect of the attitude object.

According to Assael (2004) consumer cognitive or beliefs about brands are the characteristics or attributes they ascribe to it, the affective/feeling component represents consumer's overall evaluation of a brand. Beliefs about a brand are multidimensional because they represent the brand attributes consumers perceive whereas the affective component is unidimensional as it gives the consumers overall evaluation of a brand like bad or good thus it is sometimes referred to as overall brand evaluation component. Of the three components, brand evaluation is central to the study of attitudes as it summarizes consumer's predispositions to be favourable or unfavourable to the brand. Brand beliefs are relevant only to the extent that they influence brand evaluations which is the primary determinants of intended behaviour.

Opinions as measures of attitude was discussed by Doob (1994), he posited that opinion expresses attitude. Doob (1994) used opinions as an attitude measurement method but accepted that use of opinions can be limiting as a respondent may knowingly or unknowingly avoid to present real attitudes. Consumer researchers treat brand evaluations as synonymous with attitudes, it is important to know that attitudes or brand evaluations are formed by beliefs and influences intention to buy. Intention to buy which is the behavioural component is consumer's tendency to act toward an object which is generally measured in terms of intention to buy. Marketers test product concepts, ads, packaging or brand names to determine what is most likely to influence purchase behaviour (Assael, 2004).

2.2.2 Importance of consumer attitude

Boyd and Stasch (2004) observe that by virtue of attitude being relatively enduring in nature, they have particular interests to marketing strategists. They do not guarantee that certain type of behavior will occur but they are useful as guides to what buyers are likely to do in certain circumstances. Attitudes are difficult to change thus a

company should try to fit its products into existing attitudes rather than attempt to change attitudes (Kotler and Armstrong, 2004). Consumer attitudes can assist managers in positioning products in the market by considering attributes that consumer's desire and making them stand out relative to competitor's products; this can also help when segmenting the market (Ochiel, 2012).

In general the more information consumers have about a product or service; the more likely they are to form attitudes about it, either positive or negative however, regardless of available information, consumers are not always willing to process product - related information. Furthermore, consumers often use only a limited amount of the information available to them (Assael, 2004). Specifically, only two or three important beliefs about a product are likely to dominate in the formation of attitudes and less important beliefs provide little additional input. This suggests that marketers should fight off the impulse to include all the features of their products and services in their ads rather they should focus on the key points that are at the heart of what distinguishes their product from the competition (Schiffman *et al.*, 2010).

For routine brand choice consumers appear to rely upon habit and past experience rather than on the collection and evaluation of all available information in order to reduce their "cost of thinking" (Schiffman *et al.,* 2010). The same applies to the high involvement purchases, consumers appear to make use of their existing value systems and often display quite limited information research (Boyd and Stasch, 2004). According to Assael (2004), attitudes are developed based on consumer personality, family or peer group influence, information or experience. Kotler (2003) observes that a buyer's preference for a brand will increase if someone he/she respect favours the same brand strongly. However the influence of others becomes complex when several people close to the buyer hold contrary opinions and the buyer would like to please them all.

2.2.3 Characteristics of Consumer attitude

Attitudes are learned predispositions and are formed as a result of direct experience with the product, information acquired from others and exposure to mass media such as advertising (Schiffman *et al.,* (2010). Attitudes have a motivational quality that

might propel the consumer towards a given behavior; consumers often buy products associated with a favourably viewed brand name. Their favourable attitude towards the brand name is frequently the result of repeated satisfaction with products produced by the same company.

Attitudes are relatively consistent with the behavior they reflect however they are not necessarily permanent as they do change. We normally expect consumer attitudes to correspond with behavior knowing that consumers are free to act as they wish; we anticipate that their actions will be consistent with their attitudes (Schiffman *et al.,* 2010). Attitudes occur within a situation or circumstances so that at a particular point in time it influences the relationship between an attitude and behaviour. A situation can cause consumers to behave in a manner seemingly inconsistent with their attitudes (Schiffman *et al.,* 2010). It is important to understand that consumer attitudes vary from situation to situation. When measuring attitude the situation in which the behaviour takes place is taken into consideration (Kuria, 2012)

2.2.4 Techniques of measuring consumer attitude

Measurement of attitude is a standardized process of assigning numbers or other symbols to certain characteristics of the objects of interest. There are quite a number of attitude measurement scales but this study will limit itself to the discussed techniques. A Likert scale also summated ratings method is a psychometric scale commonly used in questionnaires and is the most widely used scale in survey research. When responding to a Likert questionnaire item respondents specify their level of agreement or disagreement to a statement, the format of a typical five - level Likert item is; strongly disagree, disagree, neither agree nor disagree, agree and strongly agree (Kardes, 1999). Several scales can be constructed for many different attributes or benefits at the end of analysis; a total numerical value is calculated from all the responses. A high overall score can be interpreted as a positive attitude toward the object under research and vice versa. The Likert is a method that allows respondents to give answers that relate to positive and negative attitude strengths (Kuria, 2012).

Semantic differential scales are popular attitude measurement techniques consisting of identification of a product, brand, retail outlet or other concept followed by a series of seven point bipolar rating scales. The scales are rated from lowest to highest. For example 1 may represent the lowest rating and 7 may represent the highest rating, it can be used to measure attitudes from the semantic or psychological significance which people give to a word or concept that is related to an attitude object (Ochiel, 2012). With this technique any set of descriptive opposites (bipolar adjectives) can be used depending on the particular attitude under investigation. In this case the instrument consists of a series of bipolar adjectives such as fair - unfair, pleasant - unpleasant, durable - not durable, and so on. Guttman scaling is based on the cumulative ordering of items. The aim is to determine the underlying order within a series of questions by means of obtaining dichotomous responses; that is, the respondents are required to answer yes or no to each question. This helps in examining small shifts.

2.3 Structural Models of Attitude

Schiffman and Kanuk (2010) identified four structural models of attitudes. These are tricomponent attitude model, multi attribute attitude model, the trying to consume model and the attitude toward the ad model. Psychologists desire to understand the relationship between attitudes and behavior over the years motivated them to seek and construct models that capture underlying dimensions of attitude (Schiffman and Kanuk, 2010). Multiattribute attitude models portray consumer attitudes towards an attitude object like a product, service or issue as a function of consumers' perception and assessment of the key attributes or beliefs held with regard to the particular attitude object (Fishbein, 1983). While there are many variations of the model, common ones are; the attitude toward object model, the attitude toward behavior model and the theory of reasoned action model.

The attitude toward object model is especially suitable for measuring attitudes toward a product/service or brand. According to this model, consumer attitude towards product/specific brands of a product is a function of the presence/absence and evaluation of certain product specific beliefs or attributes. Attitude toward behavior model is the individual's attitude towards behaving or acting with respect to an object

rather than the attitude towards the object itself. Attitude toward the Ad model seeks to understand the impact of advertising or some other promotional vehicle like catalogue on consumer attitude towards particular products or brands (Schiffman *et al.*, 2010). Attitude toward the Ad is also defined as a predisposition to respond in a favorable/unfavorable manner to a particular advertising stimulus during a particular exposure occasion.

Theory of Planned Behaviour (TPB) assumes that behavioral intention is the most important determinant of behavior. Behavioral intention is believed to be influenced by a person's attitude toward performing a behavior and whether individuals who are important to the person approve or disapprove of the behavior. Intentions are plans to act in a particular way and represent the motivation toward the behaviour; they are influenced by attitude towards the behaviour, subjective norms and perceived control over the behaviour (Ajzen, 1991). Attitudes are overall evaluations of the behaviour as either desirable or not desirable, subjective norms evaluate perceived social pressures to perform/not perform a particular behaviour. Perceived behavioural control is individual's perception of extent to which performance of the behavior is easy or difficult.

Theory of trying to consume model is designed to account for the many cases in which the action/outcome is not certain but instead reflects the consumer's attempts to consume or purchase. In trying to consume there are often personal or environmental impediments that might prevent the desired action or outcome. Key point is that in these cases of trying; purchase, possession, use or action is not and cannot be assumed to be certain. The Theory of Reasoned Action (TRA) represents a comprehensive integration of attitude components into a structure like the basic tricomponent attitude model. It incorporates a cognitive component, an affective component and a conative component however these are arranged in a pattern different from that of the tricomponent model. In accordance with the model to understand intention there is need to measure the subjective norms which influence an individual's intention to act.

2.4 Consumer Decision Making Process

Buying and using products or services occurs as a result of consumer decision making. Engel, Kollat and Blackwell developed a model known as Consumer Decision Process model (CDP) which shows steps a consumer goes through from need recognition then relevant information search followed by pre purchase evaluation of alternatives, purchase, consumption, post purchase evaluation then finally divestment. According to Blackwell *et al.,* (2006) need recognition occurs when an individual senses a difference between what he or she perceives to be the ideal versus the actual state of affair, consumer information searching maybe internal from memory, knowledge or external from peers, family and the market place. Evaluation of alternatives involves evaluating options identified during the information search process followed by purchase decision and consumption.

Post consumption evaluation enables consumer's experience a sense of either satisfaction or dissatisfaction, satisfaction occurs when consumer's expectations are matched by perceived performance whereas when experiences and performance fall short of expectations dissatisfaction occurs (Blackwell *et al.,* 2006). Divestment is the last stage in the consumer decision process model where consumers have the option of outright disposal, recycling or remarketing. Consumer's decision making maybe low or high based on information processing and involvement thus we can have a product that requires low information processing and low involvement like salt (commodity products), low information processing and high involvement like TV programmes (Brand loyalty), high information processing and low involvement like Candy (Variety seeking) or high information processing and high problem solving like automobiles (Problem solving), (Kardes *et al.,* 2011).

2.5 Diffusion of Innovation

Diffusion is defined as the process by which an innovation (new idea) is communicated through certain channels over time among the members of a social system (Blackwell *et al.,* 2006). Diffusion is the process by which the acceptance of an innovation (a new product, new service, new idea or new practice) is spread by communication (mass media, salespeople or informal conversations) to members of a

social system (a target market) over a period of time (Schiffman *et al.,* 2010). A product might be around for a long time but still be perceived as new in a given market. Consumers can be classified according to the time it takes them to adopt a new product relative to other consumers. Innovators are usually the first consumer groups to adopt products and tend to be adventuresome, risk takers and well educated.

Early adopters are the next and tend to be opinion leaders, role models for others, good social skills and command respect within larger social systems. Early majority consists of consumers who deliberate extensively before buying new products yet adopt them just before the average time it takes the target population as a whole. Late majority tend to be cautious when evaluating innovations, taking more time than average to adopt them and often at the pressure of peers. Laggards are the last group to adopt innovations and tend to be anchored in the past, are suspicious and exhibit lowest level of innovativeness. Some consumers might reject a new product from the beginning, unlike laggards they might best be described as early rejecters.

2.6 Analogue to Digital Television migration process

The advent and emergence of digital broadcasting innovations have allowed for greater efficiency in the use of a country's electromagnetic spectrum creating opportunities to free up spectrum for other purposes such as wireless and public safety uses (Beal, 2013). It's benefits include; superior audio/visual quality, HDTV support, consumer savings (one aerial), content diversity, job opportunities for content developers, infrastructure sharing, higher efficiency in utilization of the scarce frequency spectrum resource resulting in a digital dividend (freed frequencies) supporting mobile and broadband (www.digitalkenya.go.ke).

Figure 2.1 Signal transmissions via digital technologies
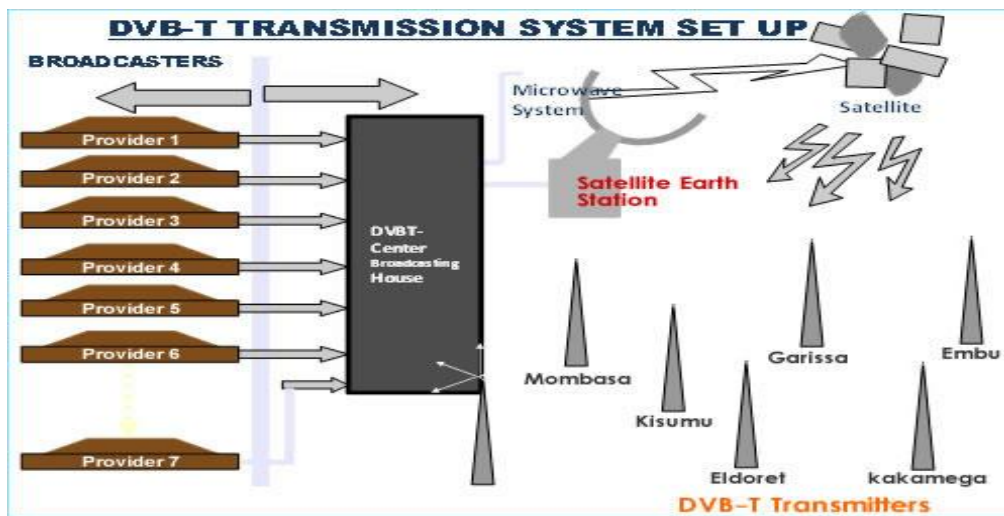
Source: www.digitalkenya.go.ke (2014)

Digital broadcasting is transmitted on radio frequencies through terrestrial space in the same way as standard analog television with the primary difference being the use of multiplex transmitters to allow reception of multiple channels on a single frequency range (such as a UHF or VHF channel) known as sub channels. Digital TV frequencies are assigned to signal distributors and not broadcasters as was in the past for analogue TV broadcasting. Once the signal distributor rolls out the digital TV infrastructure, all licensed broadcasters or broadcast content service providers will have common access to it at a cost based tariff that is approved by the Commission. The signal distributor is bound by licence conditions to provide open access to the digital platform for all interested licensed broadcasters on a fair, non discriminative basis (CCK information Paper, 2013).

A set top box is a receiver that decodes or converts digital signals to analog so as to enable the channels be displayed in an analog TV set and is connected to a TV set. Rosenberg (2013) points that one of the critical factors identified by the European Union was set top boxes for successful migration to Digital Terrestrial Television (DTT). A set top box when connected to an analog television set converts digital signals thereby giving viewers ability to watch digital programmes on their ordinary TV sets. The other option for the consumer is to acquire an integrated digital TV set (idTV) which has an inbuilt set top box hence does not require a set top box.

Chalaby (1999) posits that the broadcasting media is in the age of risk due to the advent of digital television, digitization process challenges public service broadcasters and may contribute to weakening their presence in the public sphere. Beck (1992) argues that digital television is a medium for a 'radicalized modernity' and, that we are witnessing a major break within modernity hence a new society is unfolding in front of us. Dawson (2010) argues that since the introduction of digital platforms, their adoption tends to breakdown Socio - economic lives resulting to widening digital TV divide and more unsettling is the deficit in digital TV research, there is desperate need for work that looks more closely to non-adopter's experiences of television's ongoing transformations, on the other hand, digital research as a whole shows deficiency which needs to be redressed by scholars.

Kai, M., and Enderwick, P. (2000) conducted a study in Hongkong on attitude towards technology adoption guided by cognitive model. The research sought to investigate why majority of manufacturers we're avoiding investing in technology, or adopting foreign technology. In their research, they hypothesised attitude towards adoption to be influenced by six internal beliefs; perceived difficulty, adoptive experiences, supplier's commitment to the firm, perceived benefits, compatibility and enhanced value. Study findings showed that, the cognitive process which determined attitude towards technology adoption was affected by all the six hypothesised internal beliefs. The study also found that the individual external environmental forces did not significantly influence the formation of a behavioural intention to adopt.

Wong, W.T. (2010) sought to determine consumer's attitude towards mobile advertising using 781 mobile users in Hongkong; Theory of Reasoned Action (TRA) was employed. The aim of the study was to investigate the behavioural intention to receive and read mobile advertisements with attitude serving as the mediator, the study also examined the underlying factors which affect attitude, including opt - in and opt - out permission, ubiquity and personalization. Findings of the study showed that mobile phone users hold unfavourable attitude towards intention to Short Message Service (SMS) adverts. Informativeness, entertainment, irritation, ubiquity and opt - out permission have significant effects on attitude among the beliefs. Attitude is the major mediator between belief dimensions and behavioural intentions.

Ochiel (2012) conducted a study on attitude of Parastatal employees towards the proposed increase in premiums by the National Hospital Insurance Fund (NHIF) and found that the quality of services offered by the scheme is a major factor influencing employee's attitudes towards contributing to the proposed scheme. The study was guided by the Multi attribute attitude component; The study found that 63% of the respondents agreed that they would be willing to contribute more if the quality of services is improved whereas 53% of the respondents noted if things remain as they were in terms of service quality then they were better off contributing to another scheme other than the NHIF. The study revealed that customer attitudes influence to a greater extent contribution of National Hospital Insurance Fund scheme.

Infotrack Research undertook a survey on digital migration in December, 2013 commissioned by COFEK. Key findings were; Nairobi County residents are willing to switch off to digital technology but need more time, set top boxes are expensive, digital migration is not a priority to Nairobi County residents and that the awarding of Digital TV signal distribution license should be through competitive bidding. Githinji (2013) conducted a case study on challenges of access and implementation of digital migration in Nairobi County in Makadara constituency and came up with similar findings. Kimani (2010) studied on adoption of the prepaid electricity system by Kenya Power Limited Company, the findings revealed that benefits the company was aiming to accomplish had been realised to a large extent. Kayumba (2013) carried out a research on challenges faced by MTN in introducing mobile money product in Rwandan telecom market. Njoki (2013) researched on Factors determining strategic adoption of digital banking by Commercial banks in Kenya.

Most local Consumer attitude studies focus on Food industry (Mwanatena, 2007), Airline industry (Chaudhary, 1993), Hotel industry (Chepyegon, 1996), Garment industry (Kong'ong'o, 2000). There is little research on consumer attitude towards digital technologies; most studies focus on adoption, strategic management and challenges faced when new technologies are introduced as evident by Kimani (2010), Kayumba (2013) and Njoki (2013). Githinji (2013) conducted a study on digital migration but it was based on challenges faced and accessibility. Chalaby *et al.,* (1999) argue that the process of digitization has far reaching implications for the broadcasting field despite predictable developments. Dawson (2010) posits that

adopters of digital TV have received too much attention compared to non - adopters hence there is desperate need for work that looks more closely to non adopter's experiences of television's ongoing transformations, on the other hand, digital research as a whole shows deficiency which needs to be addressed. This study seeks to look into consumer attitude towards analogue to digital technologies.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter described proposed research method used for conducting the study. This included the research design, targeted population, sampling design and procedures, data collection and techniques for data analysis

3.2 Research Design

This research used descriptive research design approach which involves acquiring information about one or more groups of people about their characteristics, opinions, attitudes or previous experiences (Gay and Airasian, 2003). Kothari (2004) defines research design as the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy procedure. Thiong'o (2007), Ochiel (2012) and Kuria (2012), used descriptive study in their related studies.

3.3 Population of Study

The population of interest for the study comprised of Kenyan adult male and female residing within Nairobi County aged 18 years and above. The actual respondents of the study were residents of Nairobi County aged 18 years and above and living within the (8) constituencies that formed the strata for the study, respondents were accessed in estates within the constituencies (strata) through administration of questionnaire in households. Mugenda and Mugenda (2003) describes a target population as a complete set of individual cases or objects with some common characteristics to which researchers want to generalize the results of the study.

Nairobi County was composed of 8 constituencies as per the last Kenya Population and Housing Census conducted in August, 2009 (Statistical abstract KNBS, 2013). Additional nine constituencies were added as a result of subdivision of the eight constituencies namely; Kasarani, Starehe, Langata, Westlands, Embakassi, Makadara,

Kamukunji and Dagoretti. Nairobi County consumers are of interest to this study because analogue switch off will first take place in Nairobi County before implementation in other region (CCK Information Paper, 2013).

3.4 Sampling Design

A stratified random sampling method was used to select a sample of (80) respondents from the (8) constituencies within Nairobi County. From the strata (constituencies), (10) respondents per stratum were approached for purposes of filling questionnaire for the study. Infotrack Research conducted an almost similar study successfully using (60) respondents per stratum. The research was limited to (10) respondents per stratum due to time and resource constraints. Roscoe (1975) proposes a rule of thumb for determining a sample size and posits that a sample size of 30 - 500 is appropriate for most academic researches. In stratified sampling the population is divided into several sub populations that are individually more homogenous than the total population and then items are selected from each stratum to constitute a sample. The researcher is more able to get precise estimates for each stratum due to homogeneity relative to population (Kothari, 2004).

3.5 Data Collection

Primary data was collected using structured questionnaires (see appendix 2); the questionnaires were administered to (10) respondents per stratum comprising of Kenyan male and female adults who were accessed in households within the strata through door to door, drop and pick method. The questionnaire was divided into four sections; Section A consisted of general information about the respondents, Section B, C and D consisted of questions relating to consumer attitude towards analogue to digital migration of TV broadcasting technologies.

3.6 Data Analysis

Data was analyzed using descriptive statistics. Data collected was summarized, edited, coded and classified into various categories as per the objectives of the study and responses. Collected data was analyzed and presented in form of tables, cross tabulations, frequencies and percentages. Pearson correlation coefficients and matrices were conducted to test the correlation among variables and demographics.

CHAPTER FOUR

DATA ANALYSIS

4.1 Introduction

Data analysis was guided by the research objectives presented in chapter one. The report contains tables directly related to the research objectives which were mainly on attitude components of cognitive, affective and conative. SPSS was also instrumental in the analysis especially in attempting to find the correlation between demographics and variables of study.

4.1.1 Response rate

The returned questionnaires were cleaned, edited and coded. Out of the 80 questionnaires distributed only 1 questionnaire was not returned but on follow up the respondent filled and returned the questionnaire thus leading to a response rate of 100% percent which was good enough to facilitate data analysis. The high success rate in questionnaire response was facilitated by explaining to participants the importance of the study and assuring them of confidentiality. From the table below the response rate of respondents is 100%. The researcher deemed the response rate adequate and sufficient for the study and for the purpose of data analysis.

Table 4.1 Response rate

Targeted respondents	Actual respondents	% Response
80	80	100%

Source: Author (2014)

4.2 General consumer information

The demographic characteristics of respondents were discussed and analyzed in terms of marital status, age in years, gender, respondent's occupation, household expenditure and highest level of education.

4.2 Sample demographics

The demographic characteristics of respondents are discussed and analyzed in terms of marital status, age in years, gender, respondent's occupation, household expenditure and highest level of education.

Table 4.2 Marital status of the respondents

Your Marital Status	Frequency	Percent
Single	49	61.3%
Married	30	37.5%
Divorced	1	1.3%
Total	**80**	**100.0%**

Source: Author (2014)

Majority of those sampled were single (49) with a percentage of 61.3% followed by those who are married at 30 contributing to a percentage of 37.5% while only 1 person was divorced at a percentage of 1.3%.

Table 4.3 Age of the respondents

Age (Years)	Frequency	Percent
19 - 29 Years	51	63.8%
30 - 39 Years	23	28.8%
40 - 49 Years	3	3.8%
50 - 59 Years	2	2.5%
Up to 18	1	1.3%
Total	**80**	**100.0%**

Source: Author (2014)

Majority 63.8% of the respondents interviewed were in the age bracket of 19 - 29 years followed by those in the age bracket of 30 - 39 years at 28.8% then 40 - 49 years at 3.8% finally 50 - 59 years at 2.5% and only 1.3% of upto 18 years. The analysis shows that most of the respondents were single probably because of the age brackets of the respondents

Table 4.4 Gender of the respondents

Your Gender	Frequency	Percent
Female	42	52.5%
Male	38	47.5%
Total	**80**	**100.0%**

Source: Author (2014)

Majority 52.5% of the respondents were female and 47.5% of the respondents were male, this implies that there were more female than male in the study.

Table 4.5 Employment status of the respondents

Employment status	Frequency	Percent
Employed	43	53.8%
Business	14	17.5%
Government	10	12.5%
Student	9	11.3%
Unemployed	4	5.0%
Total	**80**	**100.0%**

Source: Author (2014)

53.8% of the respondents were employed while 17.5% were in business, government employees comprised of 12.5% of the sample while students were 11.3% and finally those unemployed were 5.0% contributing to the total percentage of 100.

.

Table 4.6 Monthly household expenditure

Your Household Expenditure (Monthly in Kshs.)	Frequency	Percent
11000 - 29000	29	36.3%
30000 - 49000	20	25.0%
Less than 10000	13	1.3%
50000 - 69000	10	16.3%
90000 and above	6	7.5%
70000 - 89000	2	2.5%
Total	**80**	**100.0%**

Source: Author (2014)

A good proportion 36.3% of the respondents indicated that they spend approximately between 11,000 to 29,000 kshs on their monthly household expenditure followed by 25.0% who spend between 30,000 to 49,000 kshs and 16.3% who indicated that they spend between 50,000 to 69,000 on their monthly household expenditures, 2.5% of the respondents spend between 70,000 and 89,000 kshs while 7.5% spend 90,000 and above; those who spend less than 10,000 kshs on their household monthly expenditure accounted to 1.3% of the total sample.

Table 4.7 Education level

Your Highest Level of Education	Frequency	Percent
Degree	42	52.5%
Diploma	21	26.3%
Post graduate	11	13.8%
Secondary	4	5.0%
Primary	2	2.5%
Total	**80**	**100.0%**

Source: Author (2014)

The highest level of education attained was used as a measure of education. According to the research findings, the respondents were well educated. University

graduates comprised of 52.5% of the respondents with 13.8% being post graduates, 26.3% had diplomas while 5.0% had secondary education. Only 2.5% had primary education.

4.2.1 General Consumer Information per Constituency

The demographic characteristics of respondents were discussed and analyzed in terms of marital status, age in years, gender, respondent's occupation, household expenditure and highest level of education then cross tabulated with respect to the eight constituencies used for the study.

Table 4.8 General consumer information per constituency

		Constituency and Percentage (%)							
		Embakasi	Makadara	Westlands	Langata	Starehe	Kasarani	Kamukunji	Dagoretti
Marital Status	Single	30.0	60.0	90.0	40.0	70.0	90.0	33.3	72.7
	Married	60.0	40.0	10.0	60.0	30.0	10.0	66.7	27.3
	Divorced	10.0							
Age (Years)	Upto 18					10.0			
	19 - 29	70.0	50.0	90.0	60.0	60.0	70.0	66.7	45.5
	30 - 39	20.0	40.0	10.0	20.0	20.0	30.0	33.3	54.5
	40 – 49		10.0		10.0	10.0			
	50 - 59	10.0			10.0				
Gender	Male	70.0	50.0	20.0	50.0	30.0	50.0	33.3	72.7
	Female	30.0	50.0	80.0	50.0	70.0	50.0	66.7	27.3
Occupation	Business	10.0			10.0	10.0	20.0	44.4	45.5
	Government			60.0	20.0		10.0	11.1	
	Unemployed	10.0			10.0		10.0		9.1
	Student			30.0	30.0	10.0	20.0		
	Employed	80.0	100.0	10.0	30.0	80.0	40.0	44.4	45.5
Household Monthly Exp. (kshs)	Less than 10000	50.0		40.0	10.0		20.0	11.1	
	11000-29000	10.0	30.0	20.0	30.0	50.0	60.0	44.4	45.5
	30000-49000	20.0	40.0	30.0	30.0	20.0		22.2	36.4
	50000-69000	10.0	10.0	10.0	20.0		10.0	22.2	18.2
Highest Level of Education	Primary			10.0				11.1	
	Secondary	20.0				10.0		11.1	
	Diploma	50.0	60.0				30.0	55.6	18.2
	Degree	10.0	40.0	50.0	100.0	60.0	60.0	22.2	72.7
	Post graduate	20.0		40.0		30.0	10.0		9.1

Source: Author (2014)

Westlands and Kasarani had the highest population 90% of those who were single and the rest 10% married in the two constituencies; this was followed by Dagoretti 72.7% and Starehe 70.0% singles, Kamukunji had the highest 60% of those who were married. On age groups the most predominant age group across all constituencies was 19 - 29 years with Westlands having the highest 90% hence explaining the reason for high percentage of those who were single, again Westlands had the highest percentage of female respondents at 80%; Embakasi had 70% of its respondents being male while Starehe had 70% being female. All the respondents in Makadara were employed while 80% in Starehe were employed, 50% of those in Embakasi spend less than Kshs. 10,000 in a month while 60% in Kasarani spend between Kshs. 11,000 to Kshs. 29,000 in a month. The highest level of education for majority of the respondents was a degree showing high levels of literacy in the constituencies particularly in Langata where all were degree holders followed by Dagoretti 72.7%, 40.0% of the respondents in Westlands have post graduate eduction followed by Starehe 30.0% then Embakassi 20.0%, Kasarani 10.0% and Dagoretti 9.1% respectively.

4.3 Consumer Attitude (beliefs) Towards Analogue to Digital Migration

4.3.1 Consumer beliefs

Respondents were asked if they were aware of analogue to digital migration of television broadcasting technologies. Out of those sampled 100% confirmed that they were aware of analogue to digital television migration and 96% confirming that they had heard about a set top box.

Table 4.9 Consumer beliefs

Which of the following type(s) of Set Top Box do you know?		
	Frequency	**Percent (%)**
Digital decoder (Set Top Box)	46	57.5%
TV with an in built digital decoder (Set Top Box)	32	40%
Non-response	2	2.5%
Total	**80**	**100%**

Source: Author (2014)

Respondents knowledge on type of set top box was also different with 57.5% confirming that they had knowledge about digital decoders (set top box) while 40% confirming that they had knowledge about in built digital decoders (set top box), about 2.5% of the respondents did not answer the question.

Table 4.10 Consumer Knowledge

Which Digital TV Services provider do you know	Frequency	Percent (%)
Multichoice (DSTV and GOTV)	74	92.5%
Star Times	59	73.8%
Zuku	65	81.3%
Signet	30	37.5%

Source: Author (2014)

Respondents were asked which digital television service providers they knew; almost all the respondents 92.5% (74) knew about Multi choice (DSTV and GOTV) 81.3% (65) knew about Zuku 73.8% (59) knew about star times and the least known was signet. The differences in percentages was due to multiple responses as a result of respondents knowledge of more than one digital service provider, overally the responses showed a high rate of knowledge of digital television service providers.

4.3.2 Consumer Knowledge/Awareness of Digital Television Technology Attributes

The question sought to find out the attributes consumers knew about digital television with respect to the technology itself and the various contents being offered in terms of programmes. Respondents were asked on some attributes about digital television technology in order to confirm their knowledge or awareness of attributes (beliefs) in the technology. From the responses, majority 84% indicated that digital television has clear picture display, 84.7% indicated that digital television has clear sound, 86.7% indicated that digital television has more program channels, 82.4% confirmed that digital television has strong signal strength, 85.5% responded that digital television has more entertaining programs with 85.3% confirming a program guide existence in

digital television. The study established that consumer attitude (beliefs) towards digital technologies was favourable.

4.3.3 Consumer Knowledge/Awareness of Digital Television Technology Attributes per Constituency

The most known digital TV service provider is Multichoice (DSTV and GOTV) with majority of the respondents in the constituencies having knowing about the service provider followed by Zuku then Star times and lastly Signet, but again at least a good majority knew about multiple digital TV service providers.

Table 4.11 Cross tabulation on knowledge of digital providers per constituency

Set Top Box	Embakasi	Makadara	Westlands	Langata	Starehe	Kasarani	Kamukunji	Dagoretti
Multichoice (DSTV and GOTV)	7	10	10	10	8	10	8	11
	70%	100%	100%	100%	80%	100%	89%	100%
Star Times	6	9	7	8	8	9	4	8
	60%	90%	70%	80%	80%	90%	44%	73%
Zuku	10	9	9	9	7	9	5	7
	100%	90%	90%	90%	70%	90%	56%	64%
Signet	2	4	1	5	2	4	5	7
	20%	40%	10%	50%	20%	40%	56%	64%

Source: Authors (2014)

4.4 Consumer Attitude (feelings) Towards Digital Television Technology

4.4.1 Consumer Feelings

The study also sought to gauge the respondents' feelings towards analogue to digital migration of television broadcasting technologies which includes feelings towards their experiences with watching digital television. The study used semantic differential scale and Likert scale to establish the feelings of different attributes regarding digital technology. From the responses a majority of the respondents indicated that they had positive feelings by the number of percentages based on the specific questions asked. A majority 71.4% feel very good when watching digital television with 20.0% feeling fairly good and none feeling bad when watching digital television. The respondents feel very pleasant 61.9% when they watch digital television while 23.8% feel fairly pleasant, most of the respondents felt very relaxed 64.4% while 20.3% said they felt fairly relaxed, majority 66.1% indicated that they feel very interested while 25.8% felt fairly interested, 59.6% feel very refreshed, 17.5% feel slightly refreshed and 65.0% feel very positive.

Figure 4.12 How consumers feel when they watch digital television
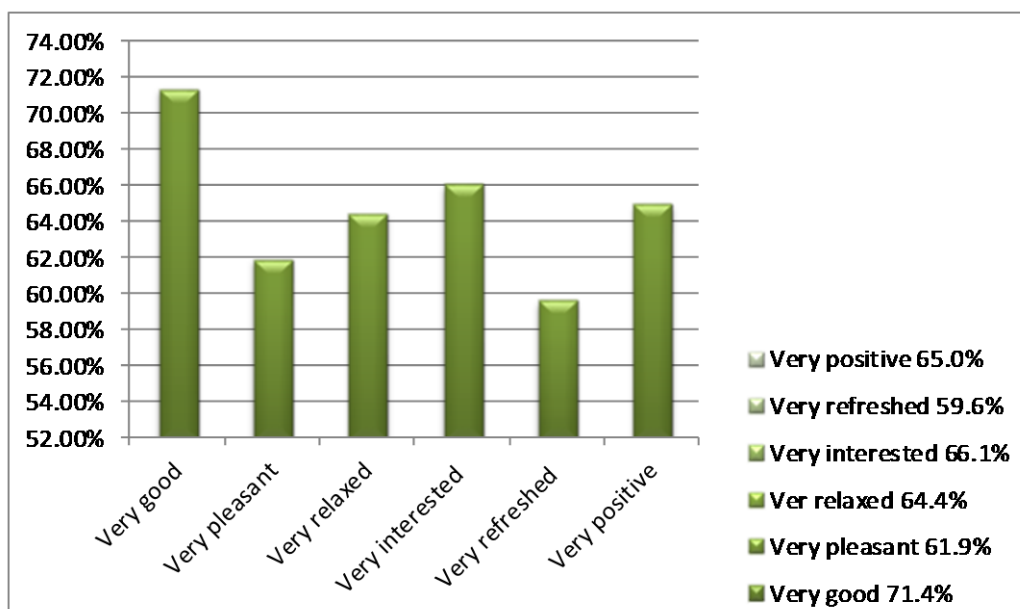
Source: Author (2014)

Table 4.13 How consumers feel when they watch digital television

Watching digital TV makes you feel?	Mean	Standard Deviation
Good	6.57	.809
Pleasant	6.33	1.107
Relaxed	6.36	1.141
Interested	6.52	.825
Refreshed	6.28	.996
Positive	6.33	1.298

Source: Author (2014)

To understand consumer feelings when watching digital television using parameters such as good, pleasant, relaxed, interested, refreshed and positive with a scale ranging from 1 to 7 used across all the parameters. On a scale of 1 to 7 with (1 - Very Bad and 7 being Very good), the respondents feels very good 6.57, (1 - Not Pleasant and 7 Very pleasant) respondents felt very pleasant 6.33, most respondents felt very relaxed 6.36 while watching digital television, very interested 6.52 and also very refreshed 6.28 and very positive 6.33 respectively. This shows that generally consumers had favourable feelings or emotions towards digital television technology

4.4.2 Cross Tabulation on Consumer Attitude (feelings) Towards Digital Television Technology per Constituency

A cross tabulation was carried out to see if there are any noticeable differences that are of statistical significance on how respondents felt per constituency. Analysing the data according to the various constituencies sampled showed high ranking of the feelings about watching digital television 7 in Kamukunji constituency where the respondents said they feel very positive when watching digital television followed closely by 6.9 in Makadara constituency where the respondents felt very relaxed and interested all together when watching digital television. The lowest was 4.33 in Embakasi about the feeling of positivity when watching digital television, with exception of Embakassi all the other constituencies had almost similar results as shown in the table that follows.

Table 4.14 How consumers feel when they watch digital television per constituency

Constituency		Good	Pleasant	Relaxed	Int - erested	Ref - reshed	Positive
Embakasi	Mean	6.44	5.71	4.80	5.60	5.50	4.33
	Std. Dev	1.014	1.604	2.490	1.517	1.291	2.805
Makadara	Mean	6.90	6.30	6.90	6.90	6.60	6.80
	Std. Dev	.316	1.567	.316	.316	.699	.422
Westlands	Mean	6.38	6.25	5.86	6.25	6.14	6.43
	Std. Dev	1.061	1.035	1.069	1.035	1.215	1.134
Langata	Mean	6.33	6.33	5.78	6.33	6.00	6.11
	Std. Dev	1.000	1.323	1.202	1.000	1.225	1.269
Starehe	Mean	6.63	6.67	6.63	6.63	6.14	6.43
	Std. Dev	1.061	.516	.744	.744	1.069	.787
Kasarani	Mean	6.75	6.83	6.83	6.71	6.67	6.71
	Std. Dev	.463	.408	.408	.488	.516	.488
Kamukunji	Mean	6.50	6.14	6.80	6.67	6.60	7.00
	Std. Dev	.756	.690	.447	.516	.548	0.000
Dagoretti	Mean	6.60	6.50	6.78	6.67	6.33	6.56
	Std. Dev	.699	.850	.441	.500	1.118	.527
Total	Mean	6.57	6.33	6.36	6.52	6.28	6.33
	Std. Dev	.809	1.107	1.141	.825	.996	1.298

Source: Author (2014)

To identify to what extent consumers agree to specific attributes related to feelings about digital television technology a five point Likert scale was used. The Likert scale ranged from 1 to 5 where; 5 = Strongly Agree (SA), 4 = Agree (A), 3 = Neutral (N), 2 = Disagree (D) and 1 = Strongly Disagree (SD). Statements about feeling with digital television watching were posed and the respondents agreed or disagreed with the statements.

Table 4.15 Extent consumers agree to the following feelings

Watching digital television makes you feel?	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Satisfied	1.3%	1.3%	10.5%	28.9%	57.9%
Revived	0.0%	1.5%	28.8%	39.4%	30.3%
Inspired	7.8%	0.0%	18.8%	48.4%	25.0%
Annoyed	59.4%	17.2%	6.3%	10.9%	6.3%
Bored	49.2%	19.0%	7.9%	11.1%	12.7%
Calm	6.3%	0.0%	37.5%	31.3%	25.0%
Regretful	59.7%	19.4%	8.1%	8.1%	4.8%
Sad	59.7%	17.7%	11.3%	4.8%	6.5%
Interested	0.0%	3.0%	10.6%	37.9%	48.5%
Proud	3.1%	4.7%	29.7%	28.1%	34.4%

Source: Author (2014)

Out of those sampled 86.8% agreed that they feel satisfied when watching digital television 10.5% were neutral while the rest disagreed, most respondents 69.7% agreed that they feel revived 28.8% were neutral and the rest disagreed about being revived while watching digital television, majority 73.4% said they feel inspired when they watch digital television, 76.6% disagreed that they feel annoyed when they watch digital television a bigger portion disagreed also that they fell bored 68.2% when they watch digital television, 79.1% disagreed that they feel regretful while 77.4% disagreed that they feel sad when they watch digital television while 86.4% feels very interested to watch digital televisions others 62.5% agreed that they feel proud when watching digital television as shown above.

Table 4.16 Extent consumers agree to the following feelings

Watching digital TV makes you feel?	Mean	Std. Deviation
Satisfied	4.4	.836
Revived	4.0	.813
Inspired	3.8	1.062
Annoyed	1.9	1.291
Bored	2.2	1.469
Calm	3.7	1.052
Regretful	1.8	1.189
Sad	1.8	1.212
Interested	4.3	.788
Proud	3.9	1.052

Source: Author (2014

To understand consumer feelings when watching digital television using the Likert scale ranging from 1 to 5 where; 5 = Strongly Agree (SA), 4 = Agree (A), 3 = Neutral (N), 2 = Disagree (D) and 1 = Strongly Disagree (SD). Statements about feelings with respect to digital television watching were posed and the respondents agreed or disagreed with the statements - relaxed, satisfied, revived, inspired, annoyed, bored, calm, regretful, sad, interested and proud with a scale ranging from 1 to 5 used across all the parameters. The respondents indicated that they had favourable attitude (feelings) towards the parameters with satisfied 4.4 being ranked high followed by interested 4.3 then revived 4.0, proud 3.9, inspired 3.8 and calm 3.7 conversely on negative feelings the respondents either strongly disagreed or disagreed on the parameters by the following responses; bored 2.2, annoyed 1.9, regretful 1.8 and finally sad 1.8.

Figure 4.2 Consumer attitudes (feelings) towards digital technologies
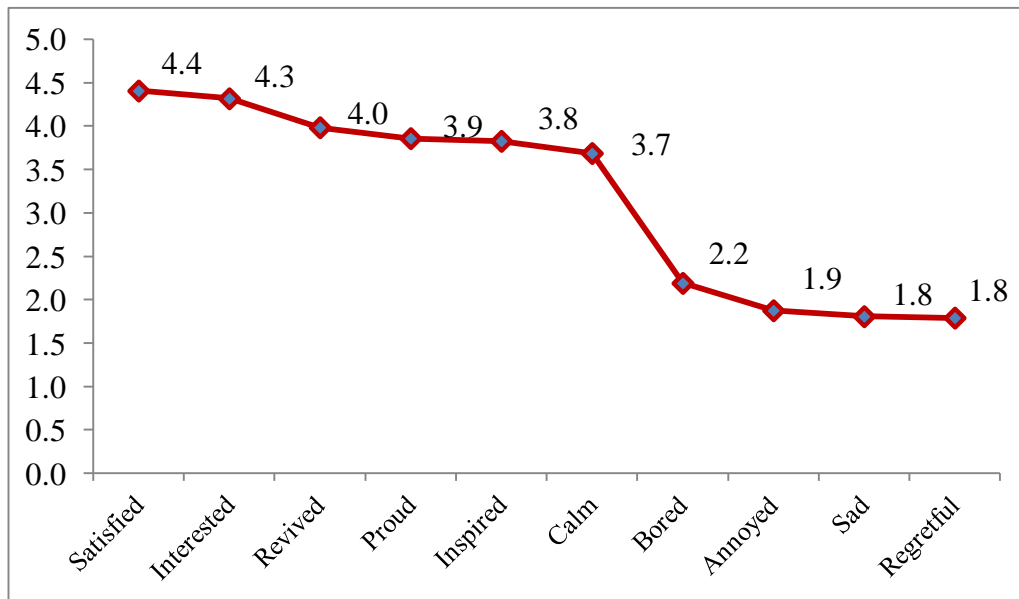
Source: Author (2014)

The figure above shows consumer feelings or emotions when watching digital television with the highest 5 being very satisfied and 1 being very dissatisfied. From the figure it can be analyzed that most of the respondents feel very satisfied 4.4 watching digital television followed by the feeling of being interested at 4.3, the least was 1.8 meaning that watching digital television does not make people feel regretful, sad or annoyed.

4.4.3 Cross Tabulation on Consumer Attitude (feelings) Towards Digital Television Technology per Constituency

A cross tabulation was carried out to see if there is any statistical significance on how respondents felt per constituency parameters given. From the results it is evident that people don't get annoyed, bored, regretful or sad when they watch digital television programmes since in the entire constituencies respondents scored very least to as low as 1.1 in Makadara constituency. The highest ranked was 4.9 in Dagoretti constituency on the feeling of being satisfied.

Table 4.17 Extent consumers agree to the following feelings per country

Constituency Mean & Standard Deviation (S.D)		Satisfied	Revived	Inspired	Annoyed	Bored	Calm	Regretful	Sad	Interested	Proud
Embakasi	Mean	3.6	3.5	3.3	2.3	3.3	3.6	3.0	2.8	4.4	3.6
	S.D	1.42	0.58	1.50	1.26	1.50	0.89	1.41	1.64	0.55	1.52
Makadara	Mean	4.7	4.2	3.8	2.1	2.6	4.1	1.5	2.1	4.6	4.1
	S.D	.48	.92	1.55	1.69	1.88	1.27	1.07	1.64	.52	.99
Westlands	Mean	4.5	3.8	3.4	1.9	2.9	2.8	1.8	1.8	3.9	3.3
	S.D	.71	.97	1.06	1.36	1.45	1.09	1.39	1.16	.93	1.32
Langata	Mean	4.3	3.8	3.7	1.9	1.6	3.7	1.8	1.6	4.6	3.7
	S.D	.67	.79	.67	1.05	.73	.71	.83	.88	.73	1.00
Starehe	Mean	4.1	4.0	4.1	2.4	2.4	4.1	2.5	2.1	4.6	4.0
	S.D	.78	.93	.69	1.51	1.60	.69	1.60	1.36	.53	.93
Kasarani	Mean	4.5	3.5	4.0	1.1	1.3	3.4	1.3	1.1	3.9	4.4
	S.D	.85	.53	.93	.35	.46	.52	.46	.35	.99	.74
Kamukunji	Mean	4.6	4.5	4.2	1.2	2.2	3.5	1.4	1.2	4.6	4.0
	S.D	.53	.55	.75	.41	1.64	1.52	.55	.41	.53	.89
Dagoretti	Mean	4.9	4.4	4.0	2.1	2.0	4.2	1.6	2.0	4.2	3.8
	S.D	.30	.67	1.18	1.58	1.61	.98	1.29	1.33	.98	1.08
Total	Mean	4.4	4.0	3.8	1.9	2.2	3.7	1.8	1.8	4.3	3.9
	S.D	.84	.81	1.06	1.29	1.47	1.05	1.19	1.21	.79	1.05

Source: Author (2014)

4.5 Consumer Attitude Towards Analogue to Digital Migration of Television Broadcasting Technologies

4.5.1 Intention to buy

The majority of the respondents 77.5% indicated that they had migrated from analogue to digital broadcasting television technology while the rest 22.5% had not. When asked about a chance to buy a set top box or a television with an inbuilt decoder the next time the respondent wants to purchase a television 58.8% said they would definitely buy one while 21.3% said they would probably buy one only 5% would not buy. Three quarter of the sampled respondents 75% indicated that they are likely to migrate from analogue to digital television broadcasting technologies before the deadline mid of next year.

Table 4.18 Intention to buy

Which of the following statements best describes the chance that you will buy a set top box or a TV with an inbuilt decoder the next time you buy a television?		
I definitely will buy one	47	58.8%
I probably will buy one	17	21.3%
I am uncertain whether I will buy one	8	10.0%
I probably will not buy one	4	5.0%
I definitely will not buy one	4	5.0%
Total	**80**	**100.0%**
How likely are you to migrate from analog to digital television broadcasting technologies before the deadline, mid of next year?		
Very likely	60	75.0%
Likely	17	21.3%
Very likely	2	2.5%
Unlikely	1	1.3%
Total	**80**	**100.0%**

Source: Author (2014)

Figure 4.3 Migration to Digital Television technology

Yes 77.5%
No 22.5%
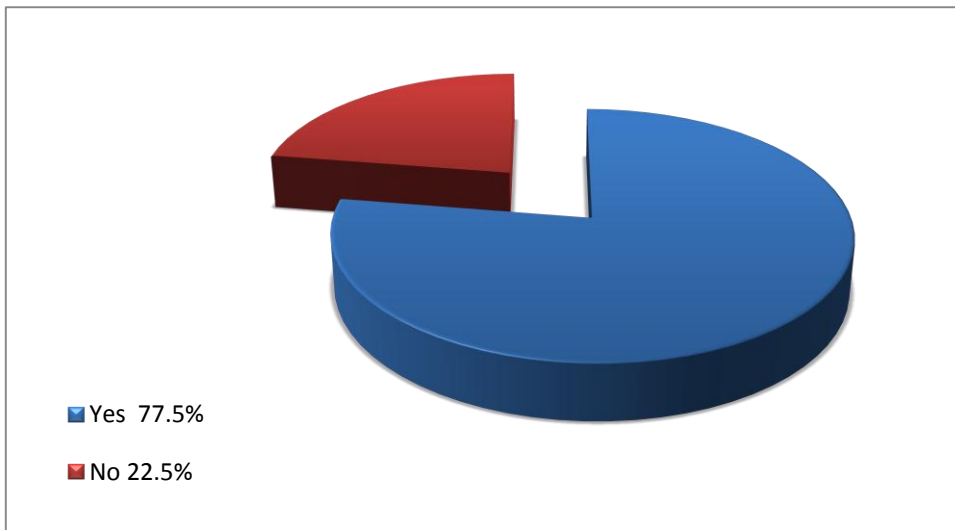
Source: Author (2014)

77.5% (62) indicated that they had migrated from analogue to digital broadcasting television technology while the rest 22.5% (18) had not.

Figure 4.4 Likelihood of migration before the deadline day

Likelihood of migration before the deadline

Very likely 75%
Likely 21.3%
Very unlikely 2.5%
Unlikely 1.3%
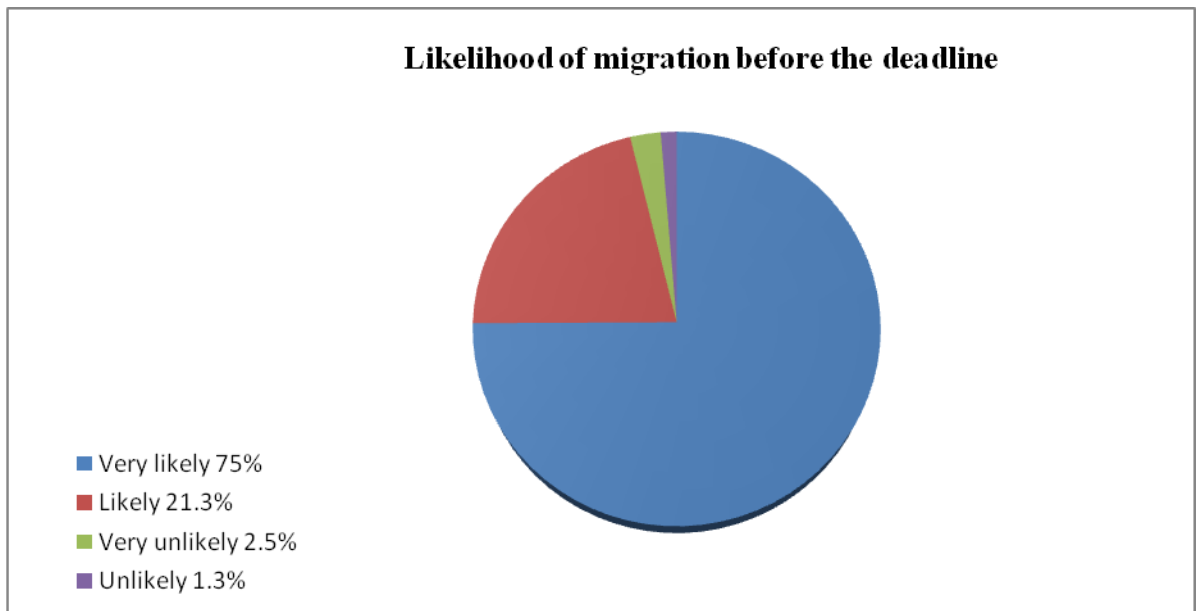
Source: Author (2014)

Findings show that 75% and 21.3% of the respondents are very likely and likely respectively to migrate before the deadline day followed by 2.5% and 1.3% respectively who are very unlikely and unlikely to migrate before the deadline day.

4.6 Consumer Opinions

Respondents were asked to give opinions on what the government should do to encourage Kenyans to buy set top boxes in order to migrate from analogue to digital broadcasting technology; the respondents gave a wide range of opinions "Most of the respondents were of the opinion that the government should educate the public on the difference between analogue and digital technology, the importance of set top boxes and the merits and demerits of digital migration".

The respondents also suggested that "the government should give the set boxes for free, avoid monthly charges of the set top boxes in order to allow all Kenyans to buy, come up with affordable boxes for Kenyans who cannot afford the set top boxes, subsidizing the prices of the set top boxes" which was the dominant suggestion, others were of the opinion that "the government should enhance freedom of transmission by any willing broadcaster" others "wanted the grace period to be extended", they should also "allow smooth migration from analogue to digital migration". The main opinion was about the price of purchasing, maintaining and migration which seemed to be the worry to almost all the respondents. Some confident consumers thought analogue switch off should be implemented as soon as possible.

4.7 Pearson Correlation Coefficient

Pearson correlation coefficients and matrices were conducted to test the correlation digital migration and the likelihood of migration from analogue to digital technology with demographics. The Pearson correlation coefficient measures the linear association between two scale variables.

Table 4.19 Pearson Correlation Coefficient

|		Have you migrated to Digital TV technology?	How likely are you to migrate from analog to digital television broadcasting technologies before the deadline, mid of next year?
Have you migrated to Digital TV technology?	Pearson Correlation	1	.402
	Sig. (2-tailed)		.000
	N	80	80
How likely are you to migrate from analog to digital television broadcasting technologies before the deadline, mid of next year?	Pearson Correlation	.402	1
	Sig. (2-tailed)	.000	
	N	80	80
Your Marital Status	Pearson Correlation	-.012	-.078
	Sig. (2-tailed)	.918	.493
	N	80	80
Age (Years)	Pearson Correlation	.015	-.132
	Sig. (2-tailed)	.896	.244
	N	80	80
Gender	Pearson Correlation	-.147	-.005
	Sig. (2-tailed)	.194	.965
	N	80	80
Your Occupation	Pearson Correlation	.022	.002
	Sig. (2-tailed)	.847	.984
	N	80	80
Your Household Expenditure (Monthly in Kshs.)	Pearson Correlation	-.018	-.204
	Sig. (2-tailed)	.872	.069
	N	80	80
Your Highest Level of Education	Pearson Correlation	.049	.035
	Sig. (2-tailed)	.667	.758
	N	80	80
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Author (2014)

From the above table there were very weak positive and negative associations between the variables (demographics and digital migration, demographics and likelihood to migrate to digital technology) This shows that none of the demographics strongly influence the migration from analogue to digital migration of TV broadcasting technology.

4.8 Summary and Discussion of findings

Most of those who were sampled were female (52.5%) and were mostly single (61.3%) and in the age bracket of between 19 to 29 years (63.8%), however most were employed (53.8%) with most having a monthly household expenditure of between kshs. 11000/= to kshs. 29000/=. This shows that most of the respondents were youth and did not have a lot of disposable income. It is very interesting to note that respondents were aware of analogue to digital migration; this shows that the issue was a serious one since it affected most people in Kenya and again the level of publicity was very high. The digital television technology is offered by different providers and also comes in different style where it can be in form of decoders (Set top box) or in built in a television.

From the study, the most known set top boxes are the normal STB's at (57.5%) with the most known service provider being Multichoice (DSTV and GOTV), star times and Zuku among others this shows that the preference was high for the three service providers. The reasons for this preference was guided by the fact that most of the respondents who are consumers in this cases know the attributes of digital technology that is clear picture, sound, multiple channels, clear signal, more entertainment and also presence of programme guide. Consumers also indicated that they felt good, pleasant, relaxed, interested, refreshed and positive when they watch digital television. In terms of satisfaction, respondents indicated that felt revived, inspired, calm, interested and also proud when watching digital television. Most of the respondents 58.8% indicated that they would definitely buy a STB showing that they are mostly likely to migrate to digital television. Through inferential statistics using Pearson correlation, it came out that the decision to migrate to digital technology had no association with the demographic characteristics of the respondents. This created a basis for no further inferential analysis since the decision to buy or migrate was not dependent on age, gender, social class or education.

CHAPTER FIVE

SUMMARY AND CONCLUSIONS

5.1 Introduction

This chapter summarizes the major findings of the study, conclusions, limitations of the study and recommendations for further research. The general objective of the study was to determine consumer attitude towards analogue to digital migration of television broadcasting technologies. Specific objectives were to determine consumer beliefs, feelings and intention to buy digital enabling devices (set top box) to facilitate migration from analogue to digital technology.

5.2 Summary of findings

Analogue to digital migration has been a contentious issue not only in the country but world at large, consumer attitude towards analogue to digital migration of television broadcasting technologies as viewed in this study showed mixed fortunes however a majority of consumers strongly support digital migration if enough support is given on the same by the government or bodies mandated to implement the transition. Support of migration from analogue to digital television broadcasting is demonstrated by consumers through their favourable attitudes with specific reference to responses on beliefs, intentions and feelings towards it. The study established that all the 80 respondents (100%) were aware of analogue to digital TV migration. Another 77.5% knew of the importance of purchasing a STB to facilitate migration while 96% of the respondents confirmed that they had heard about a set top box. This shows that in as far as knowledge and awareness is concerned, respondents are very much in touch with the government's effort in ensuring switch to digital television broadcasting.

The study also established that to some extent low income earners are less likely to own a STB as compared to high income earners - further supporting the notion that cost is a barrier. Awareness and understanding of the STB is quite impressive due to the coverage the issue has received on the media (96%). In terms of knowledge and awareness of digital broadcasting enabling devices (STB's), 57.5% of the respondents

only confirmed that they were aware of a set top box and the remaining 40% confirming that they were aware of integrated televisions, the remaining 2.5% gave no response. The difference is not too big but it shows that there has been too much effort on set top box advertisement opposed to integrated televisions, stakeholders can learn from this and target certain market segments with the same especially with awareness on possibility of buying a television that is digital ready.

Findings of the study confirmed that respondents were aware of the digital service providers with Multichoice having a lead followed by star times, Zuku then Signet; majority of the respondents had knowledge of multiple service providers hence percentages varied a lot due to multiple responses on the question. The study established that respondents understood quite well the features also attributes they value in their viewership of programmes and digital technology whereby attributes such as sound, picture clarity, signal strength, programme guide availability, more content and reliability were answered favourably thus showing positive attitude towards them, these was based on a comparative analysis between analogue and digital television technology beliefs. Majority of the respondents agreed strongly to the statement, 'I will buy a set top box or television with an inbuilt decoder (set top box) the next time I purchase a television', when asked how they feel when they watch digital television programmes majority of the consumers gave favourable responses with respect to the feelings and emotions attached to the questions such as relaxed, satisfied, interested, inspired, pleasant, refreshed and good..

The study established that still much has to be done to encourage migration even with the extensive knowledge of its existence. Respondents demonstrated knowledge of digital service providers with all the sampled respondents confirming that they were aware of analogue to digital television migration as well as a set top box. The study findings confirmed that majority of the respondents were aware of, and had positive attitude towards set top boxes opposed to televisions with an integrated digital enabling device probably due to lack of emphasis on integrated televisions. There is also a ray of hope in that 75% of the respondents indicated that they are likely to migrate from analogue to digital migration before the deadline day, mid of next year with 58% of the respondents indicating that they will definitely buy a set top box or an integrated television the next time they purchase a television.

5.3 Conclusions

There is a high level of awareness of digital television migration as well as devices that necessitate migration to digital technology, there is also positive attitude towards migration from analogue to digital television technology however respondents opinions and suggestions on what they think the government should do to encourage Kenyans to buy STB's or integrated TV's to enable them migrate from analogue to digital TV broadcasting show that they are being held back by certain constraints that they feel should be addressed. Concerns that have been raised include; most of the consumers felt that the set top boxes should be subsidized to enhance further affordability as in the case of South Africa; others felt that the set top boxes should be free all together whereas others felt that monthly subscription charges were a major impediment to migrating to digital technology.

Consumers are equally aware of attributes that digital technology has and are willing to migrate to digital technology however feel that more emphasis should be given on education and information provision in as far as the two technologies are concerned so as to enable key differences to be noted; the general feeling is that consumers are aware of digital migration but do not have adequate information about how the technology operates. There is need to emphasize on advantages and disadvantages of both technologies. There should be freedom of transmission by any willing broadcaster and that the grace period for migration should be further extended. However, a very small percentage indicated that the government should just go ahead and switch off the analogue signals to make people migrate as it is long overdue.

The government through the Communications Authority of Kenya can take note of the above concerns to enable smooth transition of the technology, while it is difficult to implement some for instance offering free set top boxes, further extending the deadline day yet we are almost approaching the world deadline day, alternatives can be arrived at such as sourcing for affordable set top boxes and/or segmenting the market and providing set top boxes that meet each market segment in terms of content and price. Information should also be provided at all levels to increase buyer confidence, the issue of monthly subscriptions should be reviewed and if possible rates revised as per the content offered since majority of consumers are not used to

paying for viewership of their favourite television channels on a monthly basis. Best practices should also be emulated from countries that have already switched to digital technology; good examples are Tanzania, Mauritius and partly Rwanda which are among the early adopters and implementers in the region.

5.4 Recommendations for further research

The study sought to determine consumer attitude towards analogue to digital migration of television broadcasting technologies in Nairobi County. The researcher further recommends that a similar study can be carried out in other counties to do a comparative analysis moreso with regard to demographic characteristics and attitude towards digital broadcasting technologies, conversely a similar study can be carried out in Nairobi County but with emphasis on other models of attitude like Multi attribute attitude model, attitude toward the ad model or theory of planned behaviour.

This is not limited only to migration of broadcasting technologies but attitude studies can also be carried out on different technological innovations that the market wakes up to every other day for instance E - Wallet by the City Council of Nairobi to collect parking fees, E - Transport that soon will be implemented by the Transport ministry after facing numerous setbacks, Electricity Pre - Pay system that is yet to be adopted nationally in the country, Mobile banking and payment of utility bills using mobile phones. This will be in an attempt to establish if there is an existence of any patterns or trends that marketers and policy makers can take advantage of, it will also help in enriching the area of attitude studies in the area of technological innovations as there exists a gap as demonstrated in available literature.

5.5 Implications for Policy, Theory and Practice

Communications Authority of Kenya, COFEK and other stakeholders especially those involved in fast tracking the digital migration process can generate important consumer insights from the findings that can assist in packaging the entire digital migration process and make it even more acceptable to the consumer especially as information, price issue and affordability of set top boxes has been mentioned on numerous occasions. Consumers also feel the licensing issue is bringing more

confusion and that broadcasters should be allowed to broadcast their content by creating easy and free access of broadcasting licensing.

One of the critical success factors identified by the European Union was the "low cost and widely available" set top boxes. In order to ensure that the success of Analogue to Digital Television Technology (DTT) migration is successful; STB's should be basic affordable commodities with minimum specifications necessary for their purpose. A second critical success factor is consumer awareness; analogue switch off should not be implemented before a considerable mass of consumers have acquired the necessary equipments, be it set top box or integrated television lest masses of people are cut off from receiving existing services. Awareness by the consumers is also critical, it is important to provide adequate and sufficient information to educate people about the impending migration process, what is involved, how it will impact on them and the steps they will need to take to ensure that they acquire a set top box. All this depends on strong and clear market communication.

Consumer's umbrella body, COFEK can get insights from a consumer's point of view and help in advocating for the consumers rights, pushing for affordability, availability and sufficient information provision for migration from analogue to digital broadcasting television technologies. Similar insights can also be useful for future technological innovations in the country as well as coming up with advertisements plans whereby focus is put on attributes or features consumers so desire as demonstrated by responses in Question 2 where majority of respondents have confirmed that picture clarity, sound clarity, signal strength, programme guides availability, more entertaining content and programmes are favourable to them.

The academicians can use the study and its findings as a basis upon which further studies on attitude can be undertaken and understanding importance of attributes in influencing consumer attitude towards products or services.

5.6 Limitations of the study

Major limitation was difficulty in knowing the average time it would take a respondent to complete filling a questionnaire even though the researcher tried as much as possible to limit the number of questions to capture the main interest of the study, this required a lot of patience since the goal of the researcher was to try as much as possible to have a 100% response rate which was achieved but more time was taken since most respondents had other commitments and in most cases had to keep the questionnaire and fill later for collection by the researcher. Financial constraint also proved to be an issue due to the total number of targeted respondents expected and mobility required inorder to atleast get responses from all the 8 strata identified for representivity.

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APPENDICES

APPENDIX I

LETTER OF INTRODUCTION

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
MSC. MARKETING PROGRAM

Telephone: 020-2059162
Telegrams: "Varsity", Nairobi
Telex: 22095 Varsity

P.O. Box 30197
Nairobi, Kenya

19 September 2014

TO WHOM IT MAY CONCERN

The bearer of this letter......BRIAN......TABU.....................................
Registration number......D65.0.627.|.2013..............................

is a bona fide continuing student in the Master of Science in Marketing (MSc. Marketing) degree program in this University.

He/She is required to submit as part of his/her coursework assessment a research project on marketing problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

Thank you.
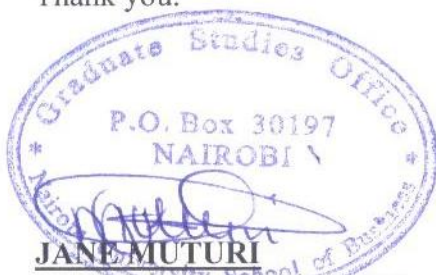
JANE MUTURI
FOR: CORDINATOR, MSc. MARKETING
SCHOOL OF BUSINESS

APPENDIX 2

QUESTIONNAIRE

STUDY OF CONSUMER ATTITUDE TOWARDS ANALOGUE TO DIGITAL MIGRATION OF TV BROADCASTING TECHNOLOGIES IN NAIROBI COUNTY

SECTION A: GENERAL CONSUMER INFORMATION

Please Tick Where Applicable √

Place of residence (Estate) _____

Mobile/Telephone number: _____

Your Marital Status		Tick	Age (Years)		Tick	Gender		Tick
Single	**1**		Upto 18	**1**		Male	**1**	
Married	**2**		19 - 29	**2**		Female	**2**	
Divorced	**3**		30 - 39	**3**				
Widowed	**4**		40 - 49	**4**				
			50 - 59	**5**				
			60 and above	**6**				

Your Occupation		Tick	Your Household Expenditure (Monthly in Kshs.)		Tick	Your Highest Level of Education		Tick
Business	**1**		Less than 10,000	**1**		Primary	**1**	
Government	**2**		11,000 - 29,000	**2**		Secondary	**2**	
Unemployed	**3**		30,000 - 49,000	**3**		Diploma	**3**	
Student	**4**		50,000 - 69, 000	**4**		Degree	**4**	
Employed	**5**		70,000 - 89,000	**5**		Post graduate	**5**	
			90,000 and above	**6**		No education	**6**	

SECTION B: CONSUMER ATTITUDE (BELIEFS) TOWARDS ANALOGUE TO DIGITAL MIGRATION OF TV BROADCASTING TECHNOLOGIES

1. Are you aware of analogue to digital television migration?

   (a) Yes ☐   (b) No ☐

ii. Have you heard of a Set Top Box?

   (a) Yes ☐   (b) No ☐

iii. If yes, which of the following type(s) do you know? (Tick both if applicable)

   (a) Digital decoder (Set Top Box) ☐

   (b) TV with an in built digital decoder (Set Top Box) ☐

iv. Which of the following Digital TV service providers do you know?

   (a) Multichoice (DSTV and GOTV) ☐

   (b) Star Times ☐

   (c) Zuku ☐

   (d) Signet ☐

2. Which of the following confirms what you know or/are aware of about Digital Television Technology? (Tick where applicable).

Attributes	Digital Television Beliefs	YES	TICK
Picture	Clear picture	Yes	
	Less clear picture	No	
Sound	Clear sound	Yes	
	Less clear sound	No	
Channels	More programme channels	Yes	
	Less programme channels	No	
Signal	Strong signal strength	Yes	
	Weak signal strength	No	
Entertainment	More entertaining programmes	Yes	
	Less entertaining programmes	No	
Programme Guide	Available	Yes	
	Not available	No	

SECTION C: CONSUMER ATTITUDE (FEELINGS) TOWARD ANALOGUE TO DIGITAL MIGRATION OF TV BROADCASTING TECHNOLOGIES

3. Watching digital television makes you feel (Tick only one box where applicable)

	Very	Fairly	Slightly	Neither	Slightly	Fairly	Very	
	1	2	3	4	5	6	7	
Good	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	Bad
Pleasant	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	Unpleasant
Relaxed	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	Not relaxed
Interested	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	Not interested
Refreshed	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	Not refreshed
Positive	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	Negative

3. To what extent do you agree with the following statements about Digital TV technology on a scale of 1 to 5? Where; 5 = Strongly Agree (SA), 4 = Agree (A), 3 = Neutral (N), 2 = Disagree (D) and 1 = Strongly Disagree (SD). (Tick only one box for each question). Watching digital television makes you feel?

	SA	A	N	D	SD
Satisfied	[ ]	[ ]	[ ]	[ ]	[ ]
Revived	[ ]	[ ]	[ ]	[ ]	[ ]
Inspired	[ ]	[ ]	[ ]	[ ]	[ ]
Annoyed	[ ]	[ ]	[ ]	[ ]	[ ]
Bored	[ ]	[ ]	[ ]	[ ]	[ ]
Calm	[ ]	[ ]	[ ]	[ ]	[ ]
Regretful	[ ]	[ ]	[ ]	[ ]	[ ]
Sad	[ ]	[ ]	[ ]	[ ]	[ ]
Interested	[ ]	[ ]	[ ]	[ ]	[ ]
Proud	[ ]	[ ]	[ ]	[ ]	[ ]

SECTION D: CONSUMER ATTITUDE (INTENTION TO BUY) TOWARDS ANALOGUE TO DIGITAL MIGRATION OF TV BROADCASTING TECHNOLOGIES

4. Have you migrated to Digital TV technology?

   (a) Yes ☐   (b) No ☐

5. Which of the following statements best describes the chance that you will buy a set top box or a television set with an inbuilt decoder the next time you purchase a television? (Tick where appropriate).

   (a) I definitely will buy one   (1) ☐

   (b) I probably will buy one   (2) ☐

   (c) I am uncertain whether I will buy one   (3) ☐

   (d) I probably will not buy one   (4) ☐

   (e) I definitely will not buy one   (5) ☐

   b. How likely are you to migrate from analog to digital television broadcasting technologies before the deadline, mid of next year? (Tick where appropriate).

   a. Very likely   ☐

   b. Likely   ☐

   c. Unlikely   ☐

   d. Very unlikely   ☐

6. In your opinion, what do you think should be done by the Government to encourage Kenyans to buy Set Top Boxes (STB's) inorder to migrate from analogue to digital television broadcasting technology?

   Thank you for your cooperation