ACCESS OF INFORMATION BY TELEVISION AUDIENCES AND THE PERIOD OF DIGITAL MIGRATION IN KESSES SUB – COUNTY – UASIN GISHU COUNTY, KENYA

BY

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This research project is my original work and has not been presented for a Degree in any other University.

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DEDICATION

I dedicate this research to my parents Rev. Abraham and Juliana Shivoko for their great inspiration and encouragement to pursue my career path. Your constant words of affirmation gave me all the strength to aim higher. It's a treasure having you in my life. You are the best. May God greatly bless you.

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ABSTRACT

The role of mass media is to inform mass audiences in diverse ways and help them make informed decisions about their day-to-day activities. Unfortunately, in this digital era some audiences are still uninformed via Digital Television due to the information divide. This study examined access of information by television audiences and the period of digital migration in Kesses Sub County, Uasin Gishu County with a view of suggesting measures for increasing accessibility of information by audiences. Objectives of this study were to: Find out sources of information used by Kesses residents, establish accessibility of information via television handset by audiences, analyze challenges emerging from digital migration and propose strategies for improving access to information by audiences. The study was guided by uses and gratification theory and adopted household survey design in gathering data. The researcher used qualitative and some aspects of quantitative approaches. Target populations for this study were TV handset owners in Kesses Sub County. Semi structured questionnaires were administered to TV handset owners but key informants were interviewed. Target population for this study was 400. The researcher used 30% to get a sample size of 120 for the study. Purposeful sampling was employed to identify 20 key informants, while simple random sampling used to identify 100 TV set owners. Interview was used to collect qualitative data while questionnaires were used to collect quantitative data which was presented and analyzed thematically and by use of descriptive statistics. The major finding of the study was that Television is a popular medium of information and that access to information via TV handset after digital migration is hardly accessed by low income earners and those in the rural due to financial constraints and unreliable connectivity. It is therefore recommended that; stakeholders should avert financial implication to consumers by; reviewing prices of set top boxes, the subscriptions, integrated televisions, the cost of digital transmission and finally, the media to give audiences appropriate information without bias. With technological evolution, digital broadcast cannot be overlooked, however, economically disempowered and the marginalized regions need to be considered in the implementation of technological advancement. This will ensure audience are enabled to access information via their television handsets hence, elevate accessibility of digital content.

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ADN - The Africa Digital Networks

ATSC - Advanced Television Systems Committee

BDM - Broadcasting digital migration

CAK - Communication Authority of Kenya

CCK - Communication Commission of Kenya

CNN - Cable News Network

DTC - Digital Television Committee

DTT - Digital Television Technology

DTV - Digital Television

DVB - Digital Video Broadcasting

DVB - T2 - Digital Video Broadcasting

DVB-T - Digital Video Broadcast Technology

EDTV - Enhanced Definition Television

EU - European Union

FM - Frequency Modulation

FTA - Free-To-Air

GBC - Ghana Broadcasting Corporation

HDTV - High Definition Television

ICT - Information Communication Technology

IDTV - Integrated Digital TV

ISDB - Integrated Services Digital Broadcasting

ITU - International Telecommunication Union

KBC - Kenya Broadcasting Corporation

KBC - Kenya Broadcasting Corporation

KFC - Kenya Film Commission

KTN - Kenya Television Network

MOA - Media Owners Association

MOA - Media Owners Association

MoIC - Ministry of Information and Communications

MoIC- Ministry of Information and Communications

NCS - National Communication Secretariat

NGOs - Non-Governmental Organization

NTV - National Television

SDTV- Standard Digital Television

SES - Socio Economic Status

STBs - Set Top Boxes

TWC - Time Warner Cable

UHF - Ultra-High Frequency

VHF - Very High Frequency

OPERATIONAL DEFINITION OF TERMS

Information access: It involves getting facts of a given phenomenon in order to improve one's knowledge of the subject matter though a provided media.

Television: It is a medium for converting visual images into electrical impulses, transferring them via radio waves, and displaying them on a screen electronically. It is a popular means of transmitting information to household through a set screen.

Low-income earners: Those whose house hold disposable money income per consumption unit is lower than the poverty level / earn less.

Consumers: This is the audience that receives the information transmitted through a provided medium for example a television, newspaper etc.

Accessibility: Obtainability of information on television handsets by audience / the quality of information being able to be reached by audience.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This research examined access of information by television audiences and the period of the migration in Kesses Sub County, in Uasin Gishu County, Kenya. From a media studies viewpoint, the study was motivated by the need for Kenya to fully transition to digital broadcasting which was a must do process for Kenya, being one of the member states of International Telecommunication Union mandated to deal with information communication and technology globally. The digital migration process presented exciting times for the television broadcast sector in Kenya due to the numerous benefits and channels available for Kenyan households to watch.

This chapter has the following sections: Background to the Study, Statement of the Problem, Aim of the Study, Specific Objectives, Assumption of the Study, Significance of the Study, Scope of the Study, Limitations of the Study and Summary.

1.2 Background to the Study

The move from analogue broadcasting to digital broadcasting is referred to as digital migration. Digital television is a cutting-edge technology that shifts service delivery from traditional analogue broadcast to digital broadcast (Haggard & McLachlan 2008).

Digital broadcasting is a more advanced method of encoding and transmitting video, audio, and image signals that use a more efficient bandwidth (Digital Migration Working Group Report,2006:10).

Countries across the globe have recognized the enormous value that digital broadcast offers and made efforts to shift from analogue information transmission to digital transmission including Kenya. Since some television audiences are still adjusting to the new technology, information disparity is being experienced by mass audiences that are low income earners especially those living in rural areas, more so from regions considered not economically viable. With this in place, access to information by the public via television sets is limited. Although some people in the society feel that the problem is insignificant and is being overblown, lack of access to information via television handset is a deprivation of power and cannot be ignored.

It is through mass media that citizens get empowered through information that leads to various personal and national developments. Digital transition has many advantages but this cannot make governments like Kenya forget that some of its citizens have inadequate access to the vital information and content disseminated by the same government yet, the welfare and participation of every citizen is paramount.

The International Telecommunication Union (ITU), a United Nations agency, welcomed delegates from 104 countries in Geneva, Switzerland, according to Communication Authority of Kenya, "Facts about Digital Migration," (2006). African countries, the Middle East and Europe gathered to devise a master strategy for the transition from analogue to digital broadcasting. A treaty that bound several nations, the Regional

Agreement sought to resolve the issue of national policies being adopted in relation to the transition to digital broadcasting. The Agreement was set on 17th June 2015 as a global switch over date (Media Council of Kenya 2015; 14). This was implemented, nevertheless, provisions were not made for those who for one reason or the other could not comply to this Act due to socio-economic barriers.

The ITU schedule complied with the European Union's (EU) recommendation that various union member states begin to phase out analog broadcasting in May 2015. Several African countries encounter obstacles throughout the digital transition phase; whether they were prepared or not, the digital migration had to occur.

Change is unavoidable, and mass communication is dynamic, bringing technological advancement (Mbatha, Ocholla & Le Roux, 2011; Mbatha, 2012). Broadcast technology is rapidly evolving, and nations must either keep up or risk falling behind. The pioneers of making the shift from analogue to digital broadcasting a reality confronted various obstacles, including how the public could afford decoders, who would run the signals, whether the deadline switch off was practical, and who would explain the digitization process to the public (Zettl, 2011).

Governments were afraid that the digital transition process would have effects on their citizens therefore, Kenyan government pledged not to spare efforts towards ensuring the success of the transition process. Kenya established an ambitious national objective of attaining digital migration by 2012, three years ahead of the June 2015 worldwide deadline set by the International Telecommunication Union. However, the digital transition process delayed due to the unforeseen controversial issues that a-rose. This

made Kenya to switch to digital broadcast in June, 2015 instead of 2012 as earlier agreed on the treaty.

Efforts by the government to beat the international deadline for analogue switch off saw most media houses caught off guard. By then, three mainstream media houses, KTN, Citizen and NTV were not ready for the migration, and were ultimately switched off indefinitely. This brought more controversy because other Television Stations had already migrated to digital broadcast by February 14, 2015, without a hitch, While the three media houses appealed for more time to establish their own decoders (set top boxes).

In the early days of the digital migration process, major media companies wanted their issues addressed in order to ensure the huge investments they probably had made in developing a countrywide broadcast infrastructure in analogue since the 90s did not go to waste. Others argued that the Communications Authority of Kenya and ICT Ministry violated broadcasters' rights (The Daily Nation Sunday, February 15th 2015).

The process of digitizing Kenya began on December 9, 2009, when President Mwai Kibaki of Kenya launched the signal in Nairobi. At that time, Kenya had adopted Digital Video Broadcast Technology (DVB-T). However, as technology advanced, the government upgraded to DVB-T2 in December 2010, which offered better sound and picture quality, more channels, a wider geographic coverage, mobile TV and digital audio, support for high standard definition, and enhanced security features.

The Ministry of Information and Communications (MoIC), Kenya Broadcasting Corporation (KBC), Media Owners Association (MOA), National Communication Secretariat (NCS), and Communications Commission of Kenya (CCK) representatives were among the members of the Digital Television Committee (DTC) that the government established in 2008. The Digital Kenya Secretariat, led by Dr. Bitange Ndemo, the Permanent Secretary for Information and Communications at the time, provided logistical support to the Digital Television Committee (DTC). The process of carrying out the Digital Migration was overseen by the Ministry of Information and Communications (MoIC).

As a prelude to the nationwide technological revolution, the project started with the design plan for the digital migration to digital broadcasting (Nyabuga and Booker 2013:33). A committee was established by the Kenyan government in March 2007 to provide recommendations on the digital migration roadmap. The team's recommendations were accepted in March 2008, and the Digital Television Committee was established to oversee the execution of the Digital Migration plan.

In 2009, Kenya Broadcasting Corporation (KBC) received Government authorization as the first ever broadcast Signal Distributor. Later on, 9th December, 2009 H.E. President Mwai Kibaki launched the pilot phase on Digital Video Broadcast signal (DVB). December 2010 the government adopted the Digital transmission technology (DVB-T2) which was a much better upgraded infrastructure. Meetings with Broadcasters, decoder vendors and other stakeholders were held in August 2011 and Pan Africa Network Group (Kenya) Co. Ltd became a second signal distributor in Kenya having been given

a license in October, 2011. February,2012, the DVB-T2 signal officially went on air within Nairobi and its surrounding areas.

In June 2012, Treasury agreed the remission of import duty on set-top boxes for the Fiscal Year 2012/2013, 2013 and the second digital platform went on air in Nairobi. The Consumer Awareness Campaign was begun on June 8, 2012, and the DVB-T signal broadcast ceased on August 31, 2012. The Africa Digital Networks Ltd consortium (ADN) comprising of the Royal Media, Nation TV, Kenya Television Network (KTN), and QTV was issued with a license on 26th November 2014 only for it to be revoked 21st January, 2015 due to disagreements. During this period audience were left with blank television screen. Thereafter, Supreme Court ordered for the lifting of the suspension on 13th February, 2015 and on the same day, Communication Authority of Kenya (CAK) gave a directive for digital migration by midnight and switched off the analogue signals to pave way for digital broadcast.

In Kenya, researchers who followed the digital transition process from the onset stated that the turn of events that unveiled include interests of the media house, politics and economic capability of the people, hence, it was not about the improvement of citizen's access to digital world easily (Ardizzone & Ferrari, 2010). This research studies access of information by television audiences and the period of digital migration in Kesses sub county in Uasin Gishu County, Kenya. The area of study was picked because the population consists of participants from diverse socio economic backgrounds hence fi for the study.

Kenya is home to five digital terrestrial television providers: PANG (owned by the Chinese), Signet (owned by the Kenyan government), BAMBA (owned by Radio Africa and Standard Media Group), ADN (owned jointly by Nation Media Group, Standard Media Group, and Royal Media), and GoTV (owned by Multichoice). By charging media entities via their platforms for signal distribution services, these signal providers set the price for media companies' coverage, infrastructure, and signal distribution. At the moment, all of these distributors are expanding their nationwide reach by setting up the required digital broadcast infrastructure.

The big question that the study intended to unveil is whether digital transition is a success in Kenya. This is because regardless of how challenging the transition has been, the fruits of digital broadcast have begun to show. For instance, audiences can now access diverse channels on the airwaves, meaning, they can access diversified content unlike before. Digital broadcast brings high quality video and audio content to the viewer enabling them to have a superior entertainment experience than in analogue error.

Due to the success of the digital migration, ISPs and all telecom operators are continuing to deploy TV using the freed-up whitespace. This will improve the nation's coverage of broadband internet. In summary, DT has completely changed the way Kenyans listen to and watch media, particularly radio and television. FM radio has not yet been phased out, and the transition to digital radio may take some time because most phones, smartphones, and other devices aside from set-top boxes do not have receivers, even though the majority of the physical infrastructure needed to support digital radio is

already in place and some players have channels. Despite this progress if the challenges experienced are not handled well not everyone will enjoy the benefits of digital technology and digitization of media and communication systems.

1.3 Problem Statement

Kenya is one of the original 120 participants and among countries at the forefront in implementing migration from analogue to Digital Television Broadcast. Additionally, Middle East and Europe committed to an "all-digital" broadcast services. Despite digital transition, little has been done about the effects of digital television on access to information by television audiences in Kenya. This is a great problem considering that some members of society are still not able to access information via their TV sets and if they do, it is inconsistent due to notable factors. Therefore, it is an urgent need for appropriate strategies to be effected to enable audience's better access to information via their television handsets especially the low income earners and those in the rural setting owing to poor connectivity.

If the issue is not attended to with the seriousness it deserves to avert information disparity, opportunity that would have otherwise been available for the public to advance in terms of getting information that enables them make informed decisions, will become foreclosed. This, in the long run, will limit equal development of the nation due to limited access to information which is vital for individual, communal and national advancement. The purpose of this study is to investigate the effects of digital transition on access to information in Kenya with special reference to Kesses sub-county, Uasin Gishu County. Digitization is a broad term in the media industry that its effects has

impacted the print, the electronic media and online. The introduction of new technologies as alternatives to terrestrial TV, such as satellite and cable TV, black-and-white televisions, and the most recent digital broadcasting, preceded technological advancement in the television industry in recent decades.

The Universal Declaration of Human Right, declared by the United Nations General Assembly on 10th December, 1948 grants everyone the right to seek out, obtain and convey information regardless of borders (Article 19). With this fundamental right to information, all governments have a duty to ensure provision of access to information to its people. Information is the foundation for establishing government-citizen relations in as much as countries vary in terms of laws on its citizen accessing to information.

In Kenya, experience of the public about digital transition suggest that financial implication on audience among other challenges is still a limiting factor to Audiences while seeking information on their television sets and this has left audiences unable to gratify their quest for information in this digital error.

1.4 Aim of the Study

The aim of this study was to investigate the access of information by television audiences and asses the period of the migration in Kesses Sub County with a view of suggesting measures to increase access of information via Television sets after the digital migration. The study assessed the benefits of digital migration and provided information on how communication and digital signals can be improved to ensure effective and reliable communication.

1.5 Specific Objectives

The survey objectives were:

i. To determine the preferred source of information among Kesses residents after digital transition.
ii. To examine the accessibility of information by television consumers in Kesses Sub County after digital migration.
iii. To analyze challenges emerging from digitization of television in regards to information access among the participants.
iv. To propose strategies for improving access to information by audiences via television handsets.

1.6 Assumption of the Study

The survey assumed that among other types of media, many Kenyans depend on television as the main means of broadcasting mass information and that financial implication that came with the Digital Migration is a limiting factor towards access to information via television handsets. Apart from cost there is the issue of public participation in migration, reliability and accessibility of information. Verification of information and affordability affects the less fortunate in society as they have less resources hence can gather minimal or at times lack the information especially those in rural areas. This necessitates the implementation of measures in order to forester accessibility of the vital information via TV handsets especially by the economically disempowered in the society, hence gratifying diverse needs of audiences.

1.7 Significance of the Study

Although research on digital television has previously been conducted, this study is bound to make an important contribution in regards to digital broadcasting and accessibility of information to audiences by providing deeper insight into finding ways of ensuring affordability and accessibility of information to television consumers via their television sets.

This study aimed at contributing to policy making in Kenya especially in the communication sector. The outcomes of this study will be used by the government and media groups as a standard in outlining parameters pertaining to introduction of new technologies in the media. This will formulate better methods of passing information through technology based inventions also; improve on the processes for realizing success while introducing new concepts to audience without bias.

The study would therefore be helpful to various service providers by creating awareness and much needed information to retain customers. Furthermore, service providers will have to put more efforts in customer care services, program quality and fair product price. This will keep companies competitive in the Kenyan market.

Similarly, the study will be useful to stakeholder such as Communication Authority of Kenya (CAK) in finding ways of improving on the challenges presented from the findings of the study thereby improving television viewership and coverage. It is also expected that the findings of the study will be of value to future scholars or researchers who will acquire good literature upon which studies on digital broadcasting of television will be obtained.

1.8 Scope of the Study

The focus of the study was on digital migration and television as a broadcast medium, a parameter within which the study operated. The geographical scope of the study was confined to Kesses Sub County, Uasin Gishu County from which access to information via television handset was investigated. This is because in terms of population the region is in the rural and has both middle and low income earners, hence, the participants were suitable for the researcher in getting full representation of the whole population from the sample taken.

1.9 Limitations to the Study

The researcher anticipated that some participants would expect monetary gains from the study. However, explanation was given to participants that this is an academic study, a researcher is a student and that any contribution to the study is on voluntary basis.

Another difficulty encountered throughout the data collection process was finding time to conduct interviews with key informants, the media specialists who were extremely busy. While the vast majority of key informants preferred face-to-face interviews, few opted to respond to questions via email which the researcher incorporated with face to face in collecting quantitative data for the study.

Language barrier was a challenge encountered with some participants during field work. In this case, the researcher involved a research assistant who ensured there's effective communication with participants due to interpretations.

The study worked on the premises to investigate the access to information by Television audiences and further suggest measures to improve but however failed to control the possible influence of other factors. From the time of study, data collection to its presentation, some new insights on repackaging of decoder subscription emerged which the researcher kept on updating.

1.10 Summary

This Chapter provides an overview of the initial topics that formed the basis of the research study. It examines the problem statement that inspired the study and the purpose of the study, providing an explanation for the decision to undertake the study. Additionally, the objectives and assumptions of the study were discussed, as well as the importance of the study, its scope, and its limitations. All of these elements formed the basis for the research study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The process of looking through the body of literature related to a research problem in order to create a theoretical and conceptual framework for the study and to integrate the study's findings with what has been written about them in the literature is known as a literature review, according to Kumar (2018). By examining earlier studies and theories, the researcher integrated those findings into this investigation and emphasized any gaps in the body of knowledge.

Kasomo (2010) agrees that literature review entails reading and incorporating previous studies that are related to the present study. Literature review serves to enrich and consolidate knowledge of the researcher in the subject area and helps scrutinize the outcomes of the study in line with the existing body of knowledge.

Therefore, literature review helped to place the study in perspective to what others have examined on digital broadcast; in addition, the process helped to improve research methodology and provided theoretical background to the study. Some of the literature reviewed includes; Earlier studies on Digital migration, books and journals in relation to digital migration theories and access to information.

2.2 Theoretical Framework

The researcher used gratification theory which was invented in the early 1940s by Katz and Blumler (1974). The scholars focused on studying why audiences choose specific media for content consumption. Research on uses and gratifications has primarily concentrated on the gratifications that media users have sought over the past few decades. Research on the effects of media consumption as well as the social and psychological demands that media fulfills were conducted in the 1970s. Research on the uses and gratifications theory is more important than ever because of the widespread use of media technology in understanding people's motivations for selecting particular media and the satisfactions they derive from it. According to Katz and Blumler (1974), media consumers should actively choose and use the media. Their goal-oriented use of media makes them actively participate. Theorists contend that a media consumer searches for the media source that best satisfies their needs. Uses and gratifications presuppose that the user has options beyond using the internet and print media to fulfill their needs.

The uses and gratifications theory's proponents look at how the general public utilizes media. This argument holds that people use media to fulfill specific needs or desires. The resources at hand, however, limit these desires. For example, you might enjoy following your friends on Twitter while watching a show like Oprah Winfrey or Steve Harvey. A lot of people use the Internet for self-expression, information, entertainment, and interacting with like-minded people.

Every one of these applications has a purpose, and the purpose dictates the frequency of media usage. By looking at the variables that affect the media preferences of various populations, researchers can determine the motivations behind media consumption (Papacharissi, 2009). A typical uses and gratifications study examines the motivations behind media consumption as well as its effects. You are using the Internet to kill time and stay in touch with friends when you tweet while watching TV. There are many common reasons why people consume media, according to research. These include opportunities for social interaction and leisure as well as a range of interpersonal and social requirements. By examining the reasons behind people's media consumption, researchers can gain a deeper understanding of the factors that contribute to a medium's appeal as well as the roles that media plays in society. For instance, an analysis of the motivations behind a particular user's interactions with Facebook may shed light on the social function of the platform and its allure.

Media theorists who focus on uses and gratifications frequently examine contemporary media issues. The examination of the connection between violence in the media, for example, serves as evidence of this. Researchers used the uses and gratifications hypothesis in this example to highlight a complex set of characteristics surrounding the consumption of violent media, even though people with aggressive inclinations were drawn to violent media (Papacharissi, 2009). Four arguments are made for our decisions based on our wants and preferences for what we often desire to see in the media:

Information and education: When it comes to information and education, audience selects what to watch for example, information about a breaking news or a documentary.

Entertainment and escapism: Possibly the most common reason for media consumption is amusement. Escapism refers to their desire to escape their reality through amusement. Playing video games or viewing fictitious films and TV shows are two examples.

2.2.1 Uses and Gratifications Theory

The public's use of media is the main focus of the uses and gratifications theory, not how it impacts them. Harold Lasswell, a communication theorist, published it for the first time in 1948, and numerous other scholars have since contributed to its improvement. Lasswell (1948) presented the four functional interpretations of the media on a macro sociological level, and Wright (1960) improved them on both the macro and micro sociological levels.

As per the Katz et al. (1974, p. 23), the media performed the roles of cultural transmission (or socialization), enjoyment, correlation, surveillance, and amusement for the entire society as well as for individuals and subgroups within it.

There are many typical reasons why people consume media, including opportunities for social engagement and leisure, as well as a variety of interpersonal and social requirements. For example, someone who uses Twitter is amusing themselves online and connecting with friends. A typical uses and gratifications research study looks into the justifications for media usage and the outcomes of such use. By examining the reasons behind people's media consumption, researchers can gain a deeper understanding of the factors that contribute to a medium's appeal as well as the roles that media plays in society. One way to understand television's place in society and its

appeal to viewers is to look into the motivations behind a particular user's interactions with the medium.

The media's uses and gratifications theory is frequently applied to modern media issues; an example of this is the examination of the connection between media and violence. Because people with aggressive tendencies were drawn to violent media, researchers used the uses and gratifications theory in this instance to uncover a complex set of circumstances surrounding the consumption of violent media (Papacharissi, 2009).

2.2.2 Assumptions of the Uses and Gratification Theory

The uses and gratifications theory is based on two presumptions about media consumers. It presents media consumers as being proactive about the media they choose to consume, to start. According to this perspective, people's use of media is active. They have motivation when selecting their media. Second, people are aware of the motivations behind the media they select. To choose media that will best serve their unique needs and desires, they rely on their understanding of their own motivations. For instance, in this study television is the most popular source of information among the participants due to the audio visual aspect of Television. From the finding of the research, during digital migration period, majority of the participants were unable to gratify their needs, their quest for information was withheld due to various impediments that come with the migration including the financial implication of the digital migration to audiences.

Based on those guiding principles, the uses and gratifications theory goes on to list five assumptions:

a) The use of media is purposeful. Individuals are driven to consume media.

b) Since people frequently control the media, they are not greatly impacted by it.

c) The selection of media is predicated on the belief that it will meet particular requirements and expectations.

d) Social and psychological variables filter the impact of media on behavior. As a result, media preferences and message perception are influenced by social environment and personality.

e) The competition for a person's attention is between media and other media. An individual might decide, for instance, to discuss a topic in person rather than watch a documentary about it.

The person's superiority over the media is emphasized by the uses and gratifications theory. Individual differences operate as a mediating factor in the relationship between media and its effects. As such, the media consumer has an equal impact on media impacts as does the content itself. As a result, not everyone will be impacted by the same media message, even if they all consume it (Katz et al., 1974).

2.2.2 Uses and Gratifications Research

A number of common reasons have been identified by research on uses and gratifications for people to watch media, including information, escape, companionship, relaxation, and passing the time. Furthermore, a more current body of research examines

how people use media to fulfill higher order needs like moral reflection and meaning-finding. Research examining the uses and gratifications of social and traditional media have been conducted.

2.2.3 Television Content Selection and Personality

The focus on individual differences in Uses and Gratifications has prompted researchers to investigate the ways in which personality influences people's reasons for using media. In order to determine whether people with different personality traits would identify different motivations for watching television, researchers from the Virginia Polytechnic Institute and State University, for instance, examined personality traits like neuroticism and extroversion. The investigator discovered that people with neurotic personalities were motivated by stimulation, companionship, leisure, and passing the time. For those with extraverted personalities, this was the opposite. Furthermore, extraverted personality types strongly rejected the companionship motive as a justification for watching TV, whereas neurotic personality types strongly preferred it. These findings, according to the researcher, are consistent with these two personality types. More emotional, shy, or socially isolated people showed a particularly strong affinity for television. Conversely, people who were more gregarious and outgoing thought that TV was a poor replacement for in-person social interactions (Vinney, 2019, P.1). All of this serves to support the application of the uses and gratification theory in his research, which focuses on how media can meet the needs of diverse audiences. In other words, audiences or media consumers select to consume a certain type of media content in order to fulfill specific needs.

2.2.4 Uses and Gratification Theory and New Media

According to academic observations, new media has some features that older media types did not have. Users now have more discretion over the content they connect with, when and how they interact with it. This increases the variety of satisfactions available to modern media users. Seven gratifications for using the internet were identified in an early study on its uses and benefits that was published in the journal Cyber Psychology & Behavior: information seeking, aesthetic experience, financial compensation, diversion, maintaining relationships, personal status, and virtual community. Since virtual communities don't exist in other media, they could be seen as a new kind of fulfillment.

A different study that was released in the journal Decisions Sciences identified three benefits of using the internet. Prior to studies on usage and gratification in television, two of these gratifications content and process gratifications had been identified. However, it was also found that using the internet was linked to a new kind of social satisfaction.

These two studies show that people use the internet to fulfill their needs as a social and collective community. Research has also been done on the satisfactions obtained and sought after from using social media. For instance, a different study that was published in Cyber Psychology & Behavior found four prerequisites for joining Facebook groups.

These needs included self-status through maintaining one's image, entertainment through using Facebook for amusement or leisure, socializing through keeping in touch and meeting new people, and information seeking through finding out about upcoming

events and products. Researchers found in another study that Twitter users used the social network to satisfy their need for connection. The satisfaction of these demands was enhanced by increased usage, as measured by the amount of time and hours spent on Twitter each week (Vinney, 2019).

2.3 Criticism

Although it continues to be a widely accepted theory in media research, uses and gratifications is not without its detractors. For instance, the theory minimizes the significance of the media. It might therefore ignore the ways in which media affects people, particularly inadvertently. Furthermore, audiences might not always be passive; the theory does not take this into consideration. Alternatively, audiences might not always be active. Lastly, some detractors contend that the uses and gratifications theory is merely a method for conducting media research because it is too comprehensive to be regarded as a theory in and of itself. The uses and gratifications theory examines media use from a more humanistic perspective.

The theory holds that media consumers are free to decide how they interact with and are impacted by the media. Blumler and Katz's values are demonstrated by their belief that media consumers have the power to choose the influence that media has on them and by their presumption that users select media options only as a means of achieving an objective. The optimist finds satisfaction and utility in the media. The theory disproves the idea that media has an unintentional influence on our lives and worldview. The idea that we only use the media to fulfill certain needs doesn't seem to fully capture the power of the media in today's culture.

2.4 Review of Past Studies

Digital migration is the process by which outdated analog broadcasting services are rendered obsolete by digital technology in terms of citizens' access to information (Berger, 2010). The switch from analog to digital broadcasting is referred to as the "digital migration." With the addition of interaction mechanisms, digital television opens the door to a new paradigm for mass communication platforms. Analog transmissions via cable were the primary means of transmitting audio and video streams over the airwaves until the 1990s, when some developed countries also used this method (Berger, 2010).

Digital migration is the process by which outdated analog broadcasting services are rendered obsolete by digital technology in terms of citizens' access to information (Berger, 2010). The switch from analog to digital broadcasting is referred to as the "digital migration." With the addition of interaction mechanisms, digital television opens the door to a new paradigm for mass communication platforms. Analog transmissions via cable were the primary means of transmitting audio and video streams over the airwaves until the 1990s, when some developed countries also used this method (Berger, 2010). The result of constrained frequencies was a cap on the total number of stations. A lot of this changed when digital technology was introduced. These technologies made it possible to save and send text, still photos, video, and sound, opening up new ways to connect and convey information across national boundaries and eventually showing up on many social aspects of a nation. Digitization would have an impact on many facets of society, including government, commerce, education, and the

economy, in addition to the technology used in encoding, transmission, and capture. Additionally, digital streams of content can be stored on the receiving device, allowing the user to pause and even fast-forward to a specific point. Compared to analog signals, digital signals are significantly more resilient to noise and electromagnetic interference.

In comparison to its analog counterpart, it is safer and above all uses less bandwidth. Simultaneous multidirectional transmission is also possible. TV stations can transmit massive amounts of data without the need for a large satellite dish thanks to digital TV's ability to compress data. More channels and better sound and picture quality result from this. Sending data back to the service provider allows you to communicate with the broadcaster or one of its affiliates when using digital television.

The following are some of the potential indirect advantages of digital migration:

The shift to digital media is reshaping public interest in broadcasting and creating concerns about who will have access to the newly created channels. It provides an opportunity to consider the potential of African public interest broadcasting and the business models that could support its public interest goals (APC, 2011). In order to increase the amount of local content on the digital platform, the digital transition provides a chance to assess the efficacy of government programs that encourage local production and local production quotas. Another factor is convergence; in many African nations, telecommunications and broadcasting are viewed as distinct vertical markets. Nonetheless, telecom operators have entered the broadcasting industry as a result of digital convergence, and broadcasting companies are looking into ways to offer voice

and Internet services. In addition to mobile broadband services, Safaricom, the top mobile provider in Kenya, provides the 'Big Box' television platform.

2.4.1 Why Television, Not Radio? The Central Focus of Digital Migration

In terms of digital migration, radio presents a far greater challenge than television, as explained by Berger (2010). For beginners, it is not economically sensible to use a converter device to play digital signals on analog radio sets. Moreover, it will take a while for digital radio sets to spread. More importantly, radio signals do not need to be digitalized right away in order to free up frequencies for other uses, unlike television. This is due to the fact that most digital radio distribution technologies do not function in lieu of FM frequencies, far from freeing up airwaves.

They have to make use of the frequencies that analog television uses. The frequencies used by FM radio are frequently unsuitable for digital audio, even if all broadcasting was immediately stopped. In contrast, television requires the repurposing of analog frequencies in order to broadcast multiple digital channels. "The switchover of current sound broadcasters from analogue to digital transmission is not necessary since AM and FM broadcasting would not be harmed by the shift," Kenya's digital migration task force declared in this regard.

2.4.2 The Technology behind Digital Transition

Three digital standards are presently vying for use in global markets: The Advanced Television Systems Committee (ATSC) standard was developed in the US and adopted there as well as four other countries. The European Digital Video Broadcasting (DVB) standard is adopted by approximately 100 countries, including the European Union. The

Japanese Integrated Services Digital Broadcasting (ISDB) standard is adopted by two countries. The European system opted to use spectrum optimization to offer multi-programming capacity, giving more signals (or programs, in the new language) in the same bandwidth, while the US system focused on higher definition television. The Japanese standard opens up access to the growing market for mobile services (mobile phones and automobiles) with a single digital transmitter.

Experts predict that the functionality of all three systems will be nearly identical (Germano, 2007). Think about how digital technologies, like digital television, code data into different states or values in order to fully comprehend the concept of digital. For example, all data is converted into strings of 1s and 0s by computers. Noise or interference of some kind may be present when information is transmitted, whether it is done so digitally or analogously. Small transmission variances, however, are irrelevant in the case of digital media since, upon decoding, any signal that approaches the discrete values utilized will be understood as that value, noise or interference in the transmission notwithstanding. Television stations used analog cameras, like the outdated tape-format devices, to record electric signals of different frequencies and amplitudes that they then used to transmit their programs before the advent of digital technology.

Digital cameras and microphones record light and sound waves, which are then converted into digital signals and transmitted in one-and-zero packs by digital television. This ensures that there are no disruptions or outside interferences and that the image is clear. It should be noted that, for viewers of analog TV, the converter box connected to the antenna does not actually convert an analog quality TV to digital

equivalent. All that a converter box does is read the digital signals that come in from the antenna and translate them into a lower resolution that can be seen on an analog TV. This implies that the quality levels of digital television will not be reflected on an analog television. This implies that the quality levels of a digital TV will not be reflected on an analog TV. You will need to have a TV with a digital tuner, or better yet, an HDTV, in order to fully utilize DTV.

2.4.3 Acquisition of Digital Infrastructure and Citizens' Access to Information

Infotrack found that nearly half (48%) of the low-income group (social economic class D) were not ready for the migration to digital TV, despite Kenya being on the verge of deciding when to migrate to digital TV due to back-and-forth between media stations, the government, and other stakeholders. Their findings are shown below. It's important to note that the wealthy and highly educated were the best prepared for the switch to digital TV. The majority of survey participants (53%) said that Set Top Boxes should cost Ksh 1000 or less. Most of the people who approved of this price were very poor. Because of this, many people might not be able to afford the current price of STBs.

An external signal source and a TV set are connected to a set top box (STB), which transforms the signal into content for the TV or other display device (digitalkenya.go.ke). Richard Alden, the chief executive officer of Wananchi Group, stated at the AfricaCom conference in Cape Town that too many people would be cut off from television if the cost of the switch from analog to digital broadcasting was too high for the average consumer. This is necessary if enough people are to be able to afford the set-top boxes required to watch digital terrestrial television. For the customer,

switching to DTT comes at a significant cost. The majority of people in the market watch FTA (free-to-air) channels.

There was still work to be done to lower costs to consumers. Tanzania and Rwanda used a harsh shut-off measures to move from analogue broadcasting signals to digital broadcast, a policy that other African governments followed as the June 2015 deadline approached. An example is Kenya, where audiences who had not complied to get decoders on time were left with blank screens an incident that left many with no access to information.

The migration processes in Tanzania and Rwanda were concluded in March and July of 2014, respectively. This occurred one year in advance of the international date line. In Rwanda, roughly 27% of television owners had decoders at the time of the digital migration, compared to Tanzania, where an estimated 3 million television sets were in use with only 500,000 decoders.

However, given that it implies the vast majority of customers would no longer be able to watch television, this was not a reasonable solution to meet the deadline. More work needed to be done to make the set-top boxes available. Many African countries have struggled with the digital migration process; South Africa is unclear about which minister is authorized to oversee the process, and Kenya has been in and out of court (Jackson, 2014). The primary success criterion for "cheap cost and widely available" set-top boxes was identified by the European Commission. The free-to-air DTT set top box needs to be basic, affordable, and have the bare minimum of specifications in order to ensure the success of the DTT migration (Rosenberg, 2013).

Free-to-air DTT set top boxes shouldn't have any non-essential criteria on them. For instance, in Namibia, the free-to-air DTT STB had to have an internet connection (such as an Ethernet port). Studies show that there is no consumer desire for interactive television or Internet access through television sets. In contrast to computers and mobile phones, which are "lean-in" devices, televisions are "lean-back" gadgets.

Customers typically favor using their computers, smartphones, and tablets (like iPads) to access the internet; these connections are made feasible by mobile telephony. Requiring a DTT set top box to have an Ethernet connection drives up the cost of the box without offering a corresponding practical benefit. The technological mechanism known as "set top box control," which forbids set top boxes from being used outside of a particular country, is another illustration of a pointless set top box feature.

Understanding infrastructure is crucial to estimating acquisition costs and determining the cost component of digital migration and audience access to information. Current digital televisions that are capable of directly receiving DVB-T broadcasts and satisfy the necessary technical requirements start at about $1,000. Only a small portion of people can afford a television at that price. Consequently, the most economical choice is the set-top box, which functions as an adapter to receive digital broadcasts on an analog TV. The cost of a new digital set-top box or television, which ranges from US$63 to $100, may also be beyond the means of potential viewers (APC Ghana, 2011).

2.4.4 Technological Readiness and Citizens Access to Information

In the world of project management, it is well known that a significant portion of a project's success is determined by how its participants view it; if they comprehend and take ownership of it, there is a clear path to success. People always oppose change (Haughey, 2012). Therefore, it should come as no surprise that most countries faced numerous obstacles and opposition when implementing the digital migration project. In her brief on "The Great Migration from Analog to Digital Terrestrial Television in Southern Africa," Rosenberg (2013) notes that research from around the world has demonstrated that two essential elements for the success of the digital transition are reasonably priced set-top boxes and consumer awareness. In order to inform people about the upcoming migration process, how it will affect them, and the steps they must take to make sure they can access DTT and obtain a set-top box (either through government subsidies if qualified or on their own), consumer awareness was essential. Strong and unambiguous market communication was necessary for this.

On December 31, 2012, Tanzania, for instance, became the first nation in East Africa to progressively discontinue analog terrestrial television broadcasting. Tanzanians are the first to "go digital," but they've been dubious of the speed of the migration process. In order to give consumers more time to purchase set-top boxes, a few non-governmental organizations and broadcasters argued for the return of analog terrestrial television.

According to a press release published in March 2013 by Article 19 of Communication Policy, 50% of TV owners in Tanzania were unable to access TV services by the end of 2012 because they lacked set-top boxes. Concerns were expressed in Article 19

regarding Tanzanian consumers' lack of access to sufficient information regarding new digital technology and financial assistance in situations where set-top boxes were out of reach. In April 2013, the Tanzanian government decided to study the effects of the first phase of the television transmission transition from analog to digital format before moving forward with the second phase.

An additional viewpoint on consumer awareness and citizens' preparedness to transition to digital platforms, specifically in Africa, is offered by Berger (2010). It makes sense to question why Africa, a continent with generally weak TV broadcast industries and occasionally insufficient high-quality content to fill available analogue broadcasting slots, is a target for the effort to clear the airwaves. Although the issue of digital migration in Africa was not urgent, it was unavoidable in the long run, which is why it was important for consumers to comprehend the factors that were propelling this phenomenon.

Most Nairobi residents do not prioritize the migration to digital TV, according to a 2013 Infotrack study conducted in Kenya. When it comes to household budgetary priorities, the majority of poll participants (58%) believe that the migration to digital TV is not as important as other necessities like food, rent, and transportation.

2.4.5 Decoder Subscriptions and Citizens' Access to Information

The digital migration offers several benefits, including increased efficiency, improved picture and sound quality, enhanced applications like electronic program guides, and the potential to expand program selection and quantity while also providing consumers with more options and favorable economic spillovers (Rosenberg, 2013). It is not without

cost, though. The dedicated TV watcher now needs to set aside money for their viewing, with monthly subscriptions being the most popular option. With the emergence of pay television platforms, which primarily broadcast via cable and/or satellite, viewers' options have significantly increased over the past three decades in many countries. Pay television providers often charge monthly subscription fees based on the package that viewers choose, and they provide free-to-air television (FTA) in addition to a wide range of other channels.

The line separating free-to-air television (FTA) from pay television is gradually disappearing. In the UK, for example, viewers who want to watch more than the five free-to-air analogue channels typically have two choices (Ottaviani, 2004). They have two options: they can sign a contract with the cable or satellite provider that includes a one-time subscription fee but no up-front costs for the provision of the required reception equipment, such as a set-top box and, if needed, a satellite antenna.

In essence, customers have a choice between services with different payment plans and content over time. In addition, ratings, advertisers, and high-quality content are all areas in which free-to-air and pay television typically compete in the same market. To watch digital television signals on a typical analogue television set, customers will need to purchase a Set Top Box (STB). The DTT signal is converted by the set top box so that it can be viewed on a typical analogue television set. This is different from pay TV, where set-top boxes are essential for ensuring that only authorized customers can view the channel. Instead of paying a subscription fee, they can purchase a digital terrestrial decoder, which will allow them to receive a variety of free terrestrial channels.

Berger (2010) argues that if digital migration is delayed, African broadcasters will hardly be able to realize their full potential on analogue TV channels, and audiences will be deprived of more TV options. On a digital signal, more channels are conceivably available; nevertheless, unless no one is concerned with the source, caliber, and schedules of the programs provided, who will provide and pay for the content? In most African countries, there is little local content available on any television station. Only 20% of the output, which consists of news, sports, a few game shows and contests, and drama, is local content, according to an interview with GBC (Ghana Broadcasting Corporation) employees. Over 40% of the total output is comprised of international content, which includes shows like Big Brother Africa and content from other African nations, especially Nigeria (Nollywood movies). The international programming is completed by Western films, sports like the English Premier League, and news programs like CNN and Al-Jazeera (APC/Balancing Act, 2011).

By 2018, the Communications Authority of Kenya (CAK) intends to raise the percentage of locally produced content that airs on local channels from 36% to 60%. The Authority, in collaboration with the Media Council of Kenya and the Kenya Film Commission (KFC), which oversees the growth of the country's film industry, is trying to make convergence technologies more accessible to local investors.

2.4.6 Access to Diverse Media Stations and Citizens Access to Information

The rise in broadcast channels and other uses for frequencies, like broadband, cost savings for broadcasting stations, a significant digital dividend, and an explosion in ICT and content development are some benefits of the digital migration. The term "digital

dividend" describes the electromagnetic spectrum that is freed up during the switch to digital television (Mwiti, 2015). Additionally, digital broadcasting is thought to be far more effective, with better sound and image quality. Additionally, it may lead to new uses like electronic program guides and increase consumer choice and the quantity and variety of television content available, all of which could have positive economic effects.

The transition may take a long time; in developing nations, it may take significantly longer for the entire population to buy new television sets with digital tuners, or at the very least the set-top boxes needed to view digital broadcasting on conventional sets. This makes the issue particularly important for broadcasting regulators and policymakers (Germano, 2007). The elimination of the need to hire transmitters is one benefit of digital transmission. Because digital broadcasting transmitters include many channels, while analogue transmitters transmit only one, the broadcaster might only need to hire a channel within a transmitter. There are plans to investigate a similar universal access concept for television transmission (APC/Balancing Act, 2011).

Population density affects the average cost of reaching viewers through different delivery methods. While satellite is useful for reaching areas with low population density, cable provides affordable service to densely populated areas. Creating distinctive, timely, excellent, and audience-focused content is essential to standing out in the media sector. We anticipate an increase in the variety of content. The media will eventually rely on content creation for revenue, so public relations companies and

advertisers should collaborate with top-notch content producers. In this manner, advertisements and content can be sold together.

Content creators need to be inventive, unlike today when most TV stations have the same show, same script, different title, and different stations. This means creating specialized products for particular market segments (MCK, 2015). Kenya might benefit from the increasing demand for local content of a high caliber that fosters national, cultural, and regional significance. The export of high-quality content will boost regional diversity, prosperity, and overall growth in addition to the Kenyan economy. Content development will be the next front in the fight against digital migration. Broadcasters must now develop their viewership by creating timely, relevant, educational, and entertaining content in order to appeal to their audience and grow their viewership. This is made possible by the widespread distribution of digital television signals.

OTT (Over-The-Top) content, which refers to the distribution of movies and television shows over the Internet without necessarily needing users to have a subscription to a traditional cable or satellite pay-TV provider like Time Warner Cable, is another model that is drawing in viewers (itvdictionary.com). One example of OTT content is Netflix. The growth of Internet television and televisions that are connected to the Internet is greatly aided by OTT. A recent study suggests that these launches could result in a loss of subscribers for cable and satellite companies (Vasquez, 2015).

2.4.7 Government Policy, Digital transition Project, and Citizens Access to Information.

The biggest factor influencing the reality of migration is the government. The government must spearhead the movement by creating appropriate guidelines for the method and speed of migration, purchasing set-top boxes for the nation's existing receivers, and generally guiding the sector in the best interests of the nation (Nigerian National Broadcasting Commission).Industry players and consumers have praised the government's decision to adopt the more sophisticated, second generation DVBT-2 digital broadcasting platform as a wise and appropriate move during Kenya's ongoing shift from analog to digital broadcast services.

A policy change that was put into effect late last year after considerable consultation with all stakeholders—broadcasters, potential content providers, broadcasting infrastructure providers, equipment vendors, and, of course, consumers—was what led to the switch from Digital Video Broadcasting - Terrestrial (DVBT) to the higher technology DVBT-2. Positively, stakeholders have been involved from the start and the government has been transparent and firm about the process. This prevented the government's finances from becoming overburdened and encouraged investment in the private sector.

Once governments have made the decision to move forward with digital migration, they need to start formulating policies. In terms of laws, rules, and government funding for digital migration, the policy lays out duties and responsibilities. In addition to broadcasting, the entire digital platform and digital internet interfaces should be taken

into account in the strategy. Across Africa, there is frequently no strategy or policy in place. Some preliminary technical work was being conducted by a small team of officials restricted to a particular ministry (Berger, 2010).

The creation of more expansive stakeholder forums has been a hallmark of best practices across the continent for creating a comprehensive approach to the problem. An early example of this approach's success was the Digital Dzonga in South Africa, which brought together all broadcasters, the government, distributors of signals, and producers and marketers of consumer appliances. There was also a consumer interest representative in attendance. These representatives coordinated the process as stakeholders. This was an officialization of the "Digital Migration Working Group," an informal group that the government had established in 2005. The Dzonga's work resulted in the piloting of set-top boxes and consumer behavior research after a test deployment of DTT in specific areas in 2009. The organization was also tasked with educating consumers about the shift to digital media.

Given the scope of the change, policymakers must give digital migration careful consideration. For instance, it is unrealistic to expect the broadcast industry to make significant progress toward DTT unless there is a clear and specific government policy regarding migration, given the associated costs. This also applies to signal providers. In a similar vein, manufacturers and dealers won't create or market set-top boxes unless specifications and prices are consistent across the board.

2.4.8 Digital Transmission versus Analogue Television

The use of digital technology to provide more channels, particularly when using standard definition television (SDTV), is known as digital television broadcasting, or DTB. When using high definition television (HDTV) or enhanced definition television (EDTV), viewers can see images with higher quality. When using Dolby digital through a traditional aerial rather than a satellite dish or cable connection, the sound quality is better (Digital Migration Working Group Report, 2006: 8).

DTB is "the broadcasting of terrestrial television in digital format," according to the South African Broadcasting Corporation (2012). One channel uses a dedicated frequency to broadcast a single channel in analog television, which is different from satellite television. This is a result of the analogue signal's high bandwidth requirements. In contrast, the digital signal undergoes compression, enabling the broadcasting of multiple channels within a single bandwidth.

Kruger and Guerrero (2002: 1) claim that DT can provide better color rendition, a larger screen, sharper images, sound quality comparable to CDs, multiple video on programs, or a single high definition television program. They claim that digital broadcasting is transmitted through terrestrial space using radio frequencies, just like traditional analogue television. The main distinction is that multiplex transmitters are used to enable the reception of multiple channels on a single frequency range, or sub channels.

Zettle (2011: 82) claims that the advent of digital television has brought about the convergence of multiple media in addition to significantly improved television picture

and sound quality. Larger and more interactive television is becoming the norm. Television news organizations can now quickly access news files thanks to centralized digital databases, and computers can now stream audio and video content over the internet.

The widescreen 16'9 format that digital broadcasting can achieve allows the viewer to see images that are more closely aligned with the shape of a movie screen, allowing them to see what the filmmaker intended. For example, when watching sports, viewers can view the action from multiple angles thanks to camera shots, which creates the impression that the viewer is engaged in the action.

2.4.9 The Impact of Digital Migration

The end of analogue transmission in the United States of America was slated for mid-2009. The deadline in South Africa was 2012. Australia and the majority of European Union member nations were also intended to complete the transition by the end of 2012, as was Kenya, though the process was delayed until early 2015. Several researchers believe that this transformation was driven mostly by governmental and industrial interests, rather than a desire to expand individuals' access to the digital world, as is commonly stated (Ardizzon & Ferrari, 2010).

This may have contributed to the delay of the changeover process in Kenya until June 2015; as a result of court battles between different parties, the process of digital migration in Kenya was subjected to intense monitoring by the authorities. Both positive and negative effects are being felt by numerous individuals and organizations as

a result of the countrywide conversion from analog to digital broadcasting. Regulators, consumers, broadcasters, and service providers are among those impacted. Both winners and losers can be found in the digital migration (Lugalambi, 2010).

The current trend of globalization has changed the national media's social, political, and economic context globally (Ardizzone & Ferrari, 2010). Digital broadcast systems have one main benefit over analog ones: they use a lot less radio frequency spectrum (Ardizzon & Ferrari, 2010).

Hadland, Aldridge, and Ogada (2006: 45) provide evidence in favor of these opinions by pointing out that this increases access and provides more capacity for delivering a wide variety of programs around the world that meet audiences' cultural and educational needs. However, audiences have been left with no option rather than expenses incurred to purchasing of set-top boxes, subscriptions and buying new television handsets due to incompatibility. The pay TV subscription is not affordable to all especially low income earners. This is contrary to analogue broadcast where one only needed a TV set which was affordable. The experience of watching television has changed thanks to the highly developed broadcasting technology known as digital broadcasting. This makes it possible for broadcasters to provide viewers with multiple channels to choose from and television content with improved picture and sound quality. However, to access the multiple channels the government should ensure affordability and accessibility of the information via television sets.

Numerous advantages come with DTT, including but not restricted to the following: An occasion to modernize the outdated broadcasting infrastructure in Kenya. By employing

satellite in regions with challenging topography, this broadcast technology helps to solve the nation's ongoing issues with broadcast coverage. The nation's socioeconomic and cultural development is another significant aspect of digital migration. For Kenya's digital migration to advance both societally and economically, access to knowledge and information is essential.

2.5 Summary

This review of the literature focuses on digital migration. One of the most important projects a country can undertake is to ensure that all of the world's population has access to television services. Television is crucial for establishing national identity, giving a platform for domestic media content, and disseminating news and information to the people, which is especially important in emerging countries like Kenya. Television programs are also a source of news and information to illiterate populations as well. Through disseminating of information in diverse vernacular channels, broadcasting educational content serves essential educational goals to mass audiences. While globally, digital broadcasting coverage is nearly complete, with nearly the entire planet covered by TV signals in household, the challenge still remains on making it accessible.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

There is no denying that television affects billions of people's lives globally. It has an impact on how we perceive and form our society, which can have both positive and negative effects. With just a small generator or solar power and a portable satellite dish, watching television is now more accessible than ever, even in the most isolated areas of the nation. In cities, television offers hundreds of channel options. It is also present in hotel rooms, business boardrooms, and educational institutions. With internet access, the reach of television has been increased even more.

3.2 Research Design

A research design, according to Orodho (2003), is a framework, an outline, or a plan that is utilized to create solutions for research problems. Kothari (2004) defined a research design as setting up parameters for data collection and analysis in a way that aims to combine relevance to the study goal. According to Kothari (2004), a research design is a plan that outlines the methodology that will be used for gathering and analyzing data. The research design described the methodological approach for conducting the study for instance; a survey, exploratory, experimental, ethnographical, historical design and a case study.

The study design utilized by this researcher was a survey. "The collecting of information from a sample of individuals through their responses to questions" is the definition of survey research (Check & Schutt, 2012, p. 160). This type of flexible research allows for a variety of methods for participant recruitment, data collection, and instrumentation. The survey approach works best when the researcher wants to investigate an issue from a large number of participants. This ensures the researcher obtains a high response rate and also, easy to administer. During research study, survey design was appropriate, it enabled the researcher administer research tools easily and was cost-effective, the researcher was able to administer interviews remotely to participants who were otherwise not able to attend physical interviews hence the challenge that might have occurred was solved.

In this study, the researcher focused on television set owners from Kessess Sub County in Uasin Gishu County, from where rich and informative data were collected.

The survey utilized a mixed approach, utilizing both qualitative and quantitative methods. In order to better understand a research problem, mixed methods research involves gathering and evaluating data using both quantitative and qualitative research approaches in a single study. Its main tenet is that combining quantitative and qualitative methods yields a more comprehensive understanding of research problems than either method working alone (Cresswell, 2006). Because all methods of data collection have limitations, the use of multiple methods can defuse some of the disadvantages of a certain method. Furthermore, the characteristics of each study approach complement each other and are employed to maximize the strengths and

reduce the limitations of each, resulting in rich data. In this case, qualitative data was collected from the key informants while quantitative data gathered from participants who were television owners from keses sub-county, Uasin - Gishu County.

3.2.1 Qualitative Approach

This method is concerned with the subjective evaluation of participants' attitudes, opinions, and conduct. This aims to understand the underlying motives and desires, as well as how individuals feel or think about a specific subject or institution. Writing is especially crucial in qualitative research since its justification is based on description, narrative, argument, and persuasion, as opposed to quantitative research, which relies on data and technological equipment (Woods 2000; 2).

The goal of qualitative research is to observe, characterize, and comprehend the environment as it is. According to Hoepfl (1997), qualitative research reports are descriptive, employing broad language and including voice in the text. The interpretive nature of qualitative data aims to identify the meaning of events for persons who experience them, as well as the researcher's interpretation of those meanings. The researcher was able to obtain participants' perspectives on access to information following digital migration from television audiences in Kesses Sub County, the selected media houses, the Communication Authority of Kenya, and set-top box service providers in this study.

During data collection of qualitative data, key informants were able to give their opinion on the accessibility of TV channels. They analyzed the challenges that the digital

broadcast has imposed on media houses and came up with proposals to alienate access to information on TV handsets by mass audiences.

3.2.2 Quantitative Approach

It is the study of phenomena, properties, and quantities along with how they relate to one another. The development and use of mathematical models was the aim of quantitative research. Creating a basic connection between mathematical representations of quantitative relationships and empirical observation is the core of quantitative research. Unlike qualitative research, which is supported by description, narrative, and argument, quantitative research is supported by statistical and technical instruments (Peter 2006;2). This entailed structured polling of participants in order to use facts and figures gathered as a reference in understanding and interpreting the phenomenon.

As a result, it was critical to sample a sufficient number of participants and guarantee that they were a representative sample of the target demographic. The researcher distributed questionnaires to 120 participants, who completed them. Questionnaires included a question for participants to describe their experiences and issues receiving information on their television sets following the digital transition. The results of the preceding research methods were analyzed in order to determine the target population's preferences for digital information accessible via television after the digital migration.

For quantitative data, participants who were from households with Television handsets were able to give their preferred sources of information and gave their experiences when it came to accessing the information from their television handsets. They also stated the

challenges they face while accessing information on their Television handsets and suggested what will see that accessibility of the vital information on their television handsets is enabled.

3.3 Target Population

The target population is the group to which the researcher intends to apply the study's conclusions (Mugenda, and Mugenda, 1999; 41). It describes a whole collection of people, things, or occasions that a researcher examines and that share certain observable traits. In this case, the study was carried out among Television handset owners in Kesses Sub - County, Uasin - Gishu County with a target population of 120 households for quantitative data. The information on television owners was picked from Kesses Member of Parliament (MP) office who was giving out Televisions, Scholarships and Cows to the residents of the constituency. Additionally, for qualitative data a target population of 20 key informants was used from where data was collected.

Table 3.1: Target Population

Participants	**Target Population**
Television set owners in Kesses - Sub County	400
Key Informants	20
Total	**422**

3.4 Area of Study

The researcher drew the respondents of the study from three wards in Kesses Constituency; Tulwet, Tarakwa, Racecourse and Kipchamo with a target population of 100, 135 and 165 households respectively. The three wards were purposefully chosen as

the study area because they had a diverse range of income earners and participants from various socioeconomic levels. Besides, the area has both rich and poor residents, since there are some who can purchase television sets and those who were freely given television sets by the area MP. The researcher was able to obtain the true picture of information on access to content on television sets.

Secondly, Kesses Sub County is in close proximity to where the researcher resides. Choice determined by the financial constraints involved. The population representation in terms of age, education, gender and financial status was chosen because these are factors likely to determine the level of challenges or affect the attitudes of media consumers on the moments and access of digital information via television sets after the migration. From the study with participants from Kesses Sub County, 55% were women and 45% men, 60% were average earners, 15% below average earns 22% unemployed and 3% were above average earners. Racecourse was left because it is located in an urban setting (Kesses Constituency Office 2018).

3.5 Sampling Technique and Sample Size

A sample size, refers to the number of people drawn from the population to form a sample (Kothari 2004; 56). In this study, sampling was done to television handset owners living in Kesses Sub County in all sections of the target population in Kesses Sub–County. Sampling is crucial to research because it removes the challenge of looking into the whole population.

Kothari (2008) states that all units that are suitable and sufficient samples that are representative of a research study make up thirty percent of the target population. T hus the researcher took 30% of the target population of 400. Therefore, the researcher utilized simple random sampling to administer questionnaires to 120 television set owners in Kesses Sub-County. A sample size of 120 was sufficient for the researcher to obtain reliable, and rich data from participants who accessed their TV sets during the migration period. In order to get in - depth data, an additional number of 20 key informants from media houses, Communication Authority of Kenya (CAK) and Decoder service providers were purposively selected for interviews. These were valuable sources of information to the researcher. Their social positions in a research setting gave them special knowledge about the subject interviewed on more extensively and detailed than ordinary people. This brought the total sample size to 140. The sample size is shown in table 3.1.

Table 3.1: Sample Size

Participants	**Sampling Method**	**Target Population**	**Sample Population**
Television set owners in Kesses Sub County	Simple Random Sampling	400	120
Key Informants Media Experts; Communication Authority of Kenya (CAK) Media Managers and editors Set Top-Box service providers	Purposive	22	22
Total		**422**	**142**

Table 3.2: Sampling Size Distribution of Kesses Sub-County Wards

Participants	**Target Population**	**Sample Size Realized (30%)**
Kesses Sub-County Wards	House Holds	
Tulwet/Chuiyat	100	30
KipChamo/Cheptiret	135	40
Tarakwa/Timboroa	165	50
Total	**400**	**120**

Table 3.3: Sample size distribution of key informants

Key Informants	**Purposive Sample population**
CAK	1
Set Top Box Service Providers;	
DsTV, GoTV, Star Times, Zuku and BambaTV	5
Media Experts	
Nation	4
KTN	2
KBC	4
KTS	2
KUTV	2
Total	**20**

3.6 Data Collection Tools

Data collection, according to Creswell (2002), is the process of gathering information from the chosen research subjects. Face-to-face interviews and questionnaires were utilized in gathering data from participants. Interviews were scheduled with the key informants who were communication experts; CAK, Set Top Box service providers' and media managers and editors from selected media houses. Questionnaires were administered to TV set owners in Kesses Sub-County by the researcher herself.

3.6.1 Interview Schedule

An interview is a series of questions a researcher asks participants while they are in the field. It is used to standardize the interview setting so that the interviewer may utilize the same questions on multiple groups or individuals in the same way (Mugenda and Mugenda, 1999). According to Hussay and Collins (2003), interviews are a means of gathering data from selected participants who are given questions to study what they know, think, and feel about the subject. Interviews, on the other hand, according to Kerlinger (2000), can generate more information than any other mode of data collecting.

In this case, face to face interview was used during the study. This enabled the researcher to seek clarification where in doubt hence the researcher was able to ensure participants gave complete, honest and reliable information, also, they provided information that would not have been possible with other data collection technologies. Unstructured interview was used which enabled participants express their own views hence yielding in depth information. The following are listed by Descombe, M. (2007; 202–204) as the benefits and drawbacks of interviews: Data that covers subjects in-

depth and in detail is best produced through interviews. Based on the depth of data collected and the knowledge of important informants, the researcher obtained insightful knowledge. Additionally, interviews build on the researcher's existing conversational skills and only require basic equipment. Informants are afforded the opportunity to expound upon their ideas, elucidate their perspectives, and propose elements they deem indispensable to the research. Interviews represent the most flexible data collection method available. When there is direct communication during an interview, information can be verified for correctness and relevancy as it is being gathered.

3.6.2 Questionnaires

Sekaran (2004) defines a questionnaire as a written set of pre-formulated questions that respondents record their responses to, typically within the context of clearly defined alternatives. Kothari (2004) observes that questionnaires have low cost even when the population is large and is widely spread geographically. The researcher administered questionnaires to participants to fill them within a time frame of up to one week at their convenience. The questionnaires were employed because they were effective research tools that allowed the researcher to collect a wide range of information from participants.

Questionnaires were easier to give because each item was followed by alternate answers, making them simple for participants to complete. Both open ended and closed ended questionnaires were administered to collect data from a cross section of the participants in Kesses Sub County. With open ended questionnaire, participants were allowed to give free responses and since they do not provide structure for participants to

reply, it allowed the researcher to obtain more detailed information. On the other hand, for closed ended questionnaires, participants were limited to stated alternative and this enables participants to give answer easily hence saving time, also, analyzing of data was made easily as well.

The essence of using both open ended and closed structured questionnaires is that it enabled the researcher get more data. This is because they supplemented each other. The questionnaires were appropriate to this study since the researcher was able to collect information that was not directly observable. This enabled the researcher to get more details on access of information by television set audiences after the digital migration.

3.7 Pilot Study

A pilot study is a small study that tests research methods, data collection tools, sample recruitment strategies, and other research strategies prior to the actual field study. Prior to the full study's execution, a pilot study helps identify potential problem areas and shortcomings in the research instruments and methodology. This makes it a crucial stage in the research project. Additionally, it can help the research team members become familiar with the protocol's procedures (Hassan, Schattner, and Mazza 2014). In this study, a smaller-scale pilot study was undertaken prior to the main study but on a smaller scale.

The developed questionnaires and interview questions were piloted to participants who had similar characteristics with actual participants for a period of one week.

Questionnaires were piloted to television owners in Kesses Sub County while interview questions piloted to key informants who were media experts.

A study was undertaken on atleast 15 participants, of these 10 were administered with the questionnaires while 5 of the participants were interviewed to test the reliability of and validity of the research instruments. As a general rule, the pilot test should comprise 1% of the sample (Cooper & Schilder, 2008).

This was carried out prior to the instruments being used in order to determine their suitability for gathering pertinent data and to detect potential issues that might arise during the actual data collection process. The research supervisors were both present in assisting with the process of ensuring the relevance of the study.

It also aimed at checking whether the questionnaires and interview questions were clear to participants. The purpose of this study was to identify any shortcomings in the research instruments by analyzing the data from the pilot study. Few questions had to be re-adjusted in line with research objectives then, the researcher proceeded with the actual data collection.

3.8 Validity

How well the data covers the actual field of study is referred to as validity (Ghauri and Gronhaug, 2005). Validity, according to Mugenda & Mugenda (1999), is the extent to which the findings of data analysis accurately depict the phenomenon being studied. According to Cohen et al. (1989), research experts determined the validity measure. Bolarinwa (2015) states that the judgmental procedure for determining whether a tool is

likely to produce content-valid data involves contacting professionals or experts in the relevant field, as well as people who can make an informed decision about the instruments' suitability to allow for adjustments based on the experts' feedback and suggestions prior to administration. The researcher asked a panel of experts for their opinion in order to test validity (Leedy & Ormrod, 2013).

In order to determine whether the instruments accurately represented the study's variables and whether their content was supported by the reviewed literature, the instruments in this study were given to a research expert from Moi University and two supervisors from the same institution. The experts read, evaluated, suggested changes, and provided comments to the researcher. Their comments were taken into account when creating the final questionnaire in order to validate the instruments and guarantee their accuracy.

Additionally, the generated questionnaires and interview questions were piloted before being utilized to determine whether they could be used to collect meaningful data and identify any problems that might arise during the actual data collection procedure.

3.19 Reliability

Assuring the consistency of the responses gathered by the instruments is the goal of reliability (Serem, et al., 2013). It is noted that validity and reliability are crucial validation techniques for proving the investigation's findings' veracity, credibility, and plausibility. This determines whether using a specific tool or instrument over time, under different research circumstances, will produce consistent results.

As a result, the researcher in this study improved the validity and reliability of the data by gathering participant information using a variety of techniques, thereby obtaining accurate data for the investigation. This study used a mixed methodological approach to calculate the validity and reliability of research tools, using questionnaires, interview guides, and document checklists for quantitative and qualitative data collection, respectively. Additionally, the necessary adjustments were made prior to giving the research participants questionnaires and interview questions.

3.10. Data Analysis and presentation

The process of giving a lot of information structure, meaning, and order is known as data analysis (Mugenda, 2012). To examine the collected data, descriptive and inferential statistics were applied. In this study, the researcher also employed both qualitative and quantitative analysis. Content analysis was used to examine secondary data in order to achieve the study's goal.

SPSS (Version 17) was utilized for analysis, encoding questionnaire responses, and providing understandable descriptive findings of the study. The researcher employed both inferential and descriptive statistics.

3.11 Ethical Consideration

Research ethics concerns how we frame and clarify research topics, process and collect data, and arrive at research conclusions in a moral and responsible manner (Saunders et al, 2007). The researcher followed study procedures before venturing out into the field to collect data. In this study, the researcher created questionnaire for participants who

were the owners of television handsets from Kesses Sub County and formulated interview questions for key informants to ensure the research tools to elicit replies related to research objectives.

During field work, participants were provided with information about the research being conducted and the researcher ensured they cooperated before proceeding with the exercise of administering the questionnaires and scheduling of interviews.

The researcher also got a request letter from school administration and from National Commission for Science, Technology and Innovation (NACOSTI) that provided permission to administer questionnaires to participants from kesses Sub County and schedule interviews with key informants who were media experts.

According to Creswell (2009), the purpose of the study must be explained to the participants. During the study, some participants needed financial assistance from the researcher; in this case, the researcher clearly explained the goal of the research that it was done voluntarily for academic purposes.

Respect for truth: According to Bassey (1999), truth is exercised by ensuing that the entire process of research does not involve any deception. Therefore, the researcher presented data as collected from participants during the study.

Confidentiality and privacy: The researcher protected those who agreed to participate in the research by not disclosing information to others without their consent. The subjects were also assured that the study is for the purposes of research.

Falsified data: “A researcher is only sound and reliable to the degree that the research is honest”, (Jwan, and Ong’ondo, 2011; 161). In this study, the researcher ensured that she gave the correct information from the field.

Plagiarism: Plagiarism occurs when a researcher presents ideas, findings, or written materials as his or her own when they are not. The researcher acknowledged all sources within the work and incorporated them in the list of references in this study.

According to Lincoln and Guba (1985), a reputable study is one whose findings are "worth paying attention to, worth taking into account" (p. 290). It serves as a set of guidelines that demonstrate that a research project was carried out competently and ethically.

By adhering to these ethical norms, the reader is convinced that this study has merit and worth, and that the findings are credible and hence potentially beneficial in guiding future research and practice.

3.12 Summary

This Chapter has presented the methodology used in conducting this study. The research design, the area of study, study population, the sample size, sampling procedures, and data collection instruments. The design adopted was household survey and the researcher used qualitative and some aspects of quantitative approaches in collecting data. Purposive sampling method was used to identify key informants and simple random sampling used to select participants who were TV Handset owners in kisses

sub–county. To ascertain the validity and reliability of research instruments, a pre-test and pilot testing was carried out and the issues of trustworthiness obscured.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This parts presents, analyzes and interprets the data from the field in line with the aim of investigating access of information on television by audiences after digital migration in Kesses Sub County. Both qualitative and quantitative data presentation and interpretation were used. Quantitative data were presented numerically and graphically while narrative description, interpretation were utilized for qualitative data. The analysis was grouped according to the various categories or areas of study covered in line with research objectives subsequently in the questionnaires and interviews. The Chapter concludes with the summary of the study.

4.2 Data presentation, Analysis and Interpretation

The Chapter is subdivided into the following subheadings which were in accordance with the research objectives and questions. These included the following: Response rate; the preferred source of information among Kesses residents; accessibility of information by television consumers in Kesses Sub County after digital migration; analysis of challenges emerging from digitization of television and Strategies for improving access to information via television handsets; Interview with the Set Top Box Service Providers; Interviews with media experts and Communication Authority of Kenya.

4.2.1. Response Rate

The quantitative research methods focused on television handset owners in Kesses Sub County. 120 participants from Kesses Sub County filled he questionnaires while 20 key informants were interviewed for qualitative data. Together, 140 participants were involved in the study. Table 4.1 presents the summary of response rate.

Table 4.1: Response Rate

Participants	**Sample size**	**Sample realized**	**Percentage**
Media Experts; Communication Authority of Kenya (1) Media managers and editors (14) set top box service providers (5)	22	20	91 %
Kesses residents (Research Participants)	120	120	100%
Total	**142**	**140**	**98%**

From the study, the researcher got a 98 % response rate. The researcher distributed 120 questionnaires to 120 participants (TV set owners) of three wards in Kesses Sub County; Chuiyat (30), Tarakwa (50) and Kipchamo (40). The researcher also interviewed participants who were the key informants. One (1) participant from the Communication Authority of Kenya, five (5) Set Top Box Service Providers were interviewed each from Gotv, star times, Zuku, Bamba, and Go TV. Finally, Media houses comprised of; Nation (4), KTN (2), KBC (4), KTS (2) and Ku TV (2).

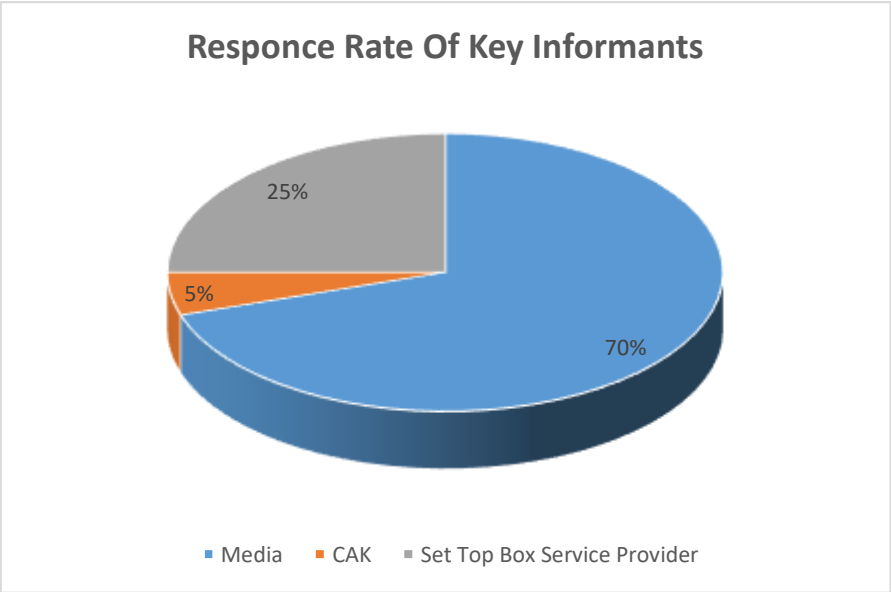

Figure 4.1 Response Rate of key Informants

The researcher engaged key informants who shed more light on the digital migration in relation to access of information via the TV sets. As shown above, the response rate among key informants, Media practitioners had 70% response rate, this was followed by Set top box service providers at 25% and finally, the Communication Authority of Kenya at 5%.

High number of participants from media houses is attributed to several media organizations being interviewed purposeful for detailed information. Also, five different Set Top Box service providers were purposefully selected to do the comparison in terms of their prices, find out the service options offered and the audiences preferences. One participant from Communication Authority of Kenya got interviewed for a richer data.

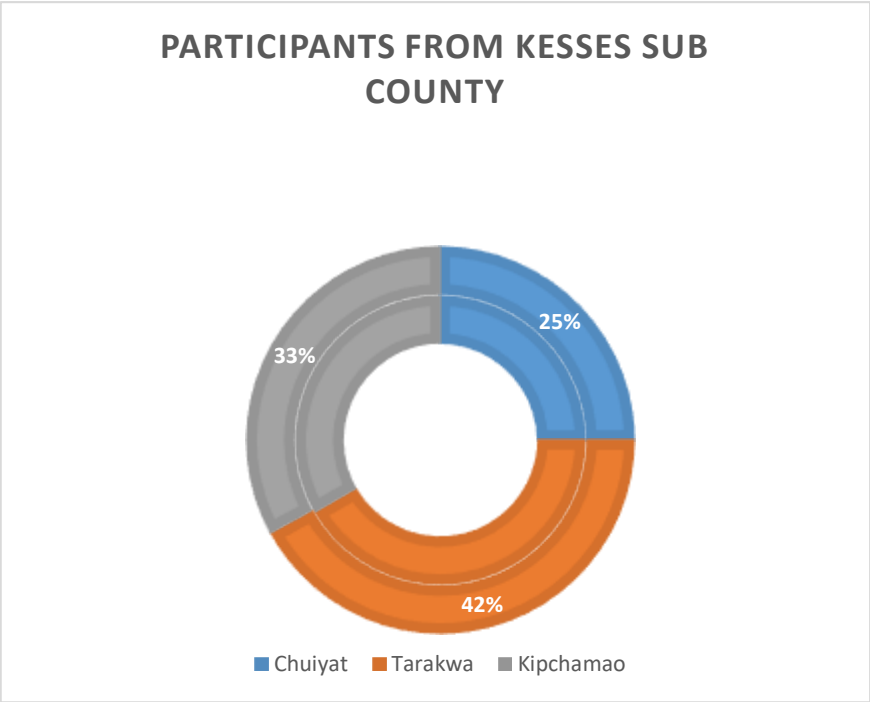

Figure 4.2 Response Rate of Television Audiences

From the study, responses rate of participants from three wards in Kesses Sub County was as follows;

Tarakwa had a 42% response rate. This was followed by Kipchamao at 33% and Chuiyat ward at 25%. These were audiences in the rural who had migrated with the advent of digital transition and accessed information via their Television sets. The difference in the response rate is due to the number of households per ward that had acquired Set Top Box after digital migration.

After the digital migration 50 households in Tarakwa ward had bought Set Top Box at the time of this study. This was followed by 40 households in Kipchamo and 30 households in Chuiyat ward.

4.2.2 Gender of the Respondents

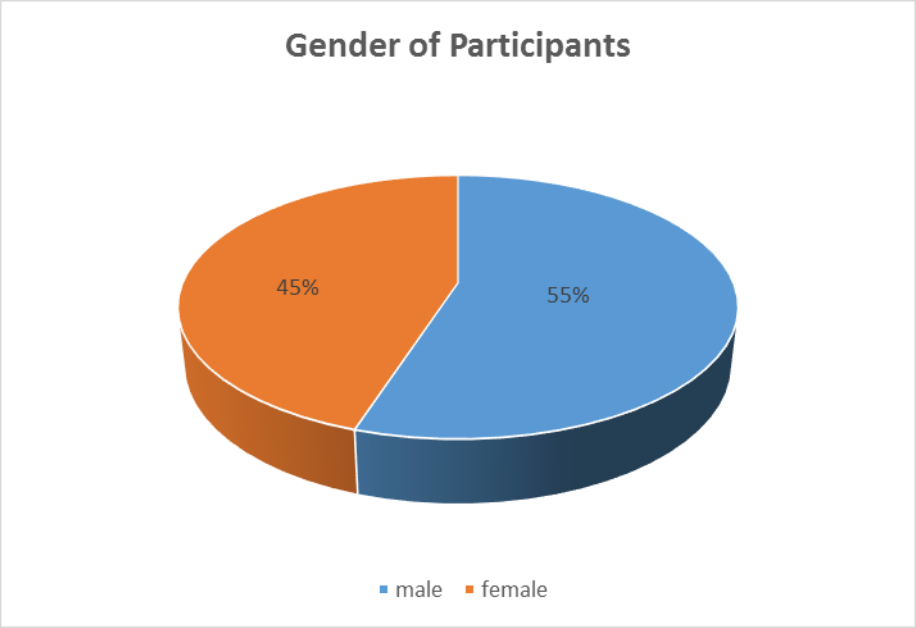

Figure 4.3 Gender of Participants

From figure 4.3 above, majority of respondents were males 66 (55%), followed by women at 54 (45%). The unevenness of the participants is because of the complexity of the whole issue of digital migration. Being a new phenomenon, most women felt the questions were technical. Hence, it was difficult to get 50% male and 50% female participants from the study. 53 % of the female respondents felt that they did not understand fully the services that come with digital migration yet, since they had not received much information of the trend in the market. However, some respondents, especially those in formal employment, went through the questionnaire before filling in and sought for guidance while answering the questions.

4.2.3 Source of Information

In objective 1, the researcher sought to find out sources of information among Kesses residents.

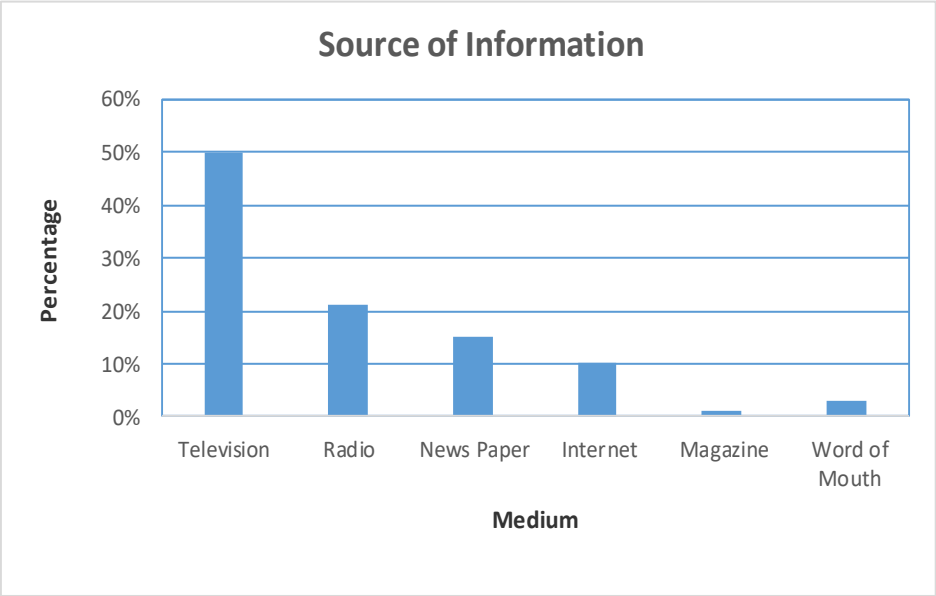

Figure 4.4 Source of Information

From figure 4.4 above, Television is the popular medium at 50% (60) while the least being magazine at 1% (1). However, when asked about alternative source of information, 21% (25), said they listen to radio as an alternative source. They said they preferred radio because it is cheap, portable and can be accessed through cell phones. Additionally, 15 % (18) of the participants' access newspapers while those who access the Internet were 10% (12). When asked about reading the newspapers, majority confessed that they don't buy their own copies but rather read at their work places, as well as newspapers from friends. However, those who rely on Word of mouth from friends make 3 % (4) of participants.

4.2.4 Accessibility of Information Via television Handsets

The second objective intended to find out the accessibility of information on television set after digital migration. Participants were asked various questions to determine this. The study revealed 93 % (112) of participant use set top box while 7 % (8) use the integrated Television. These figures were highly contributed to the fact that during the digital transition much of the publicity emphasized on decoders hence decoders were bought much earlier unlike the Integrated Televisions whose publicity came much later. The researcher also observed that a majority purchased less expensive decoders which they considered affordable.

Of the sample population, 65% admitted that the prices of decoders are high. Participants ranging from average income earners, below average and the unemployed advocated for reduction of the same and its subscription charges to make it affordable. This too justifies the use of uses and gratification theory in this study where audiences found themselves in apposition of not being able to gratify their need of accessing information on the television set.

They stated that;

> We watch our TV inconsistently due to the pending bills of subscribing. Although some decoders have reduced their prices ranging from daily subscriptions, weekly, monthly, quarterly and annual subscription, it is still not affordable to some of us. We often opt to listen to radio an alternative source of information which is considered cheap, portable, and accessible and doesn't need subscription.

4.2.5 Types of Set Top Boxes Used

The researcher also sought to find out the types of decoders participants used. According to Figure 4.5 below, 40% (48) of the participants used Star Times. This was attributed to

affordability of the decoder and subscriptions where audiences had an option of paying daily, weekly and monthly. This was followed by Bamba TV at 13 % (15) and Go TV at 30% (35) whose prizes and subscriptions were fair according to the participants. 7% (8) of them used Zuku and one of the users said “it is specially tailored to those who wanted diverse channels yet within their reach”.

The researcher found out that Dstv was used by 3% (4) of the sampled population.70% of its users were above average income earners and they purchased their decoders in time hence they were not affected by the transition that took place in February 2015.

Azam, Hotpoint and Sona were the least used decoders respectively, 1% (5), 2% (2), 3 % (3). Despite their seemingly lower prizes, fewer participants used them. Of this, 50 % attributed this to the fact that these decoders were not well known to some media consumers.

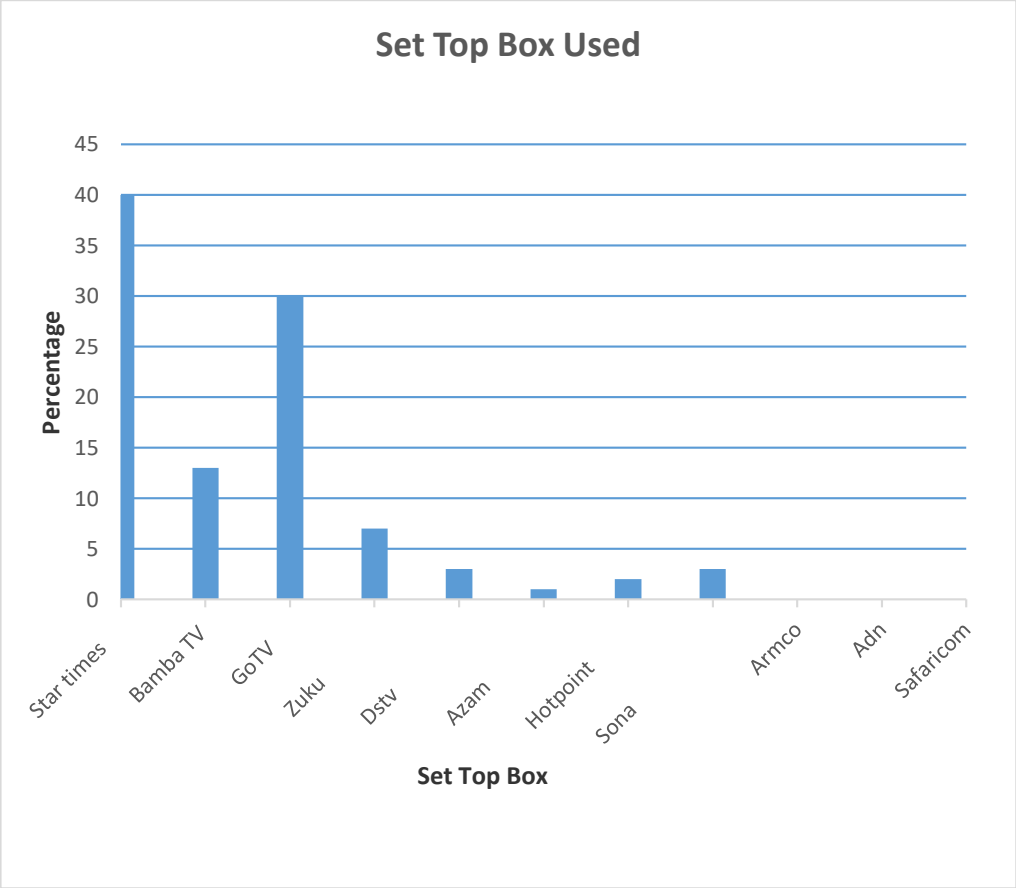

Figure 4.5 Participant users

4.2.6 Knowledge of Digital Television Services in the Market

The researcher sought to know if participants were aware of the variety of digital services. From the findings, at least 90% of the participants said they had less knowledge on the variety of Digital Television services and the variety of decoders in the market.

This was the reason why some decoders such as ADN and Armco were not used by participants in this study. In this view, the government and other stakeholders need to ensure more civic education is done to enlighten audiences on the variety of services

offered in regards to digital migration including variety of digital set top boxes and other services offered e.g. the internet connectivity. The concerned companies should also do marketing for their products.

4.2.7 Challenges of Accessing Information on TV Sets after Digital Migration

In Objective 3, the researcher intended to find from participants the challenges they encountered when accessing information via television sets after the digital migration. Majority of participants agreed that that although digitization of television is of great advantage, they experienced some challenges of which if addressed digital broadcast will be more effective in terms of viewership. 65% of the participants felt that financial implication of the migration is a limitation to audiences. The participants attributed this to Media consumers had to cover the costs of the digital migration, except that they already had a Digital Television Terrestrial (DTT) cable, they needed to purchase decoders to interface with their existing TV handset or purchase the integrated digital TV. Purchasing additional TV sets, they needed to obtain a gadget to adapt all the television sets they would use after digital transition.

It was necessary for media audiences to upgrade their aerials for good reception of the TV channels by buying new aerials. Prices of decoders were costly especially to low income earners. They stated that they would prefer free to air content, however, the price of the free to air decoder are still high, limiting its affordability especially to low income earners.

One of the participants stated that “free to air decoder ought to mean that one does not need to pay in order to access media content however, the price is still high’’. This is in terms of purchasing of decoders and subscriptions; daily, weekly, monthly, quarterly or annually depending on the decoder one used.

From the study, the participants felt that the Integrated Television (TV set that does not require a decoder or subscription) is still costly as well.

A participant who uses pay TV reiterated that;

> *Although we subscribe to the cheapest, I sometimes go without watching when I fail or delay to subscribe.*

On the other hand, 27% of the participants stated that after subscribing, several channels are imposed to them, channels which they do not or rarely watch.

> We have still not come to terms with paying for content, the subscription come with packages that include channels we do not necessarily watch. We prefer to be given maximum and the minimum number of channels from which to select specific channels most preferred by us.

8% of participants said unstable or poor signals were their challenge. During the study the researcher found out that though signal might be available it is unstable in some regions as a result, audiences look for an alternative source of information like radio and in the long run audiences are left with no value for their subscription.

On the same note, 10% of the participants stated that multi-channel viewing had made content regulation a challenge especially on the requirements for setting the type of programming, for instance, foreign content.

One of the participants noted:

> *We hardly get help when we call the service providers for help them, mostly don't understand us.*

Customer Care Services is a vital aspect that determines if a customer will use a particular product or not. From the research findings, language barrier was a challenge to participants who especially when contacting customer care centers via phone. One of the participants stated that;

> *It's a long procedure to get help from the customer care, we hardly understand each other, and it is either English or Kiswahili. This made it hard for me, I rely on my children for help. I wish there was someone to help us in our vernacular.*

Therefore, customer care services should have the capacity to meet customers' needs to their satisfaction.

Purchasing new equipment was also a requirement to some of the audiences. Digital receivers and TV sets were bought. Audiences needed to buy either a set top box to interface with their existing TV equipment or purchase an integrated digital TV which came much later. Consumers were required to upgrade their aerials as well to improve their aerial installations for good digital TV reception.

4.3 Qualitative Data Analysis

Qualitative data was collected through interviews. The researcher got insightful information by interviewing the media experts from; Communication Authority of Kenya (CAK), media managers and editors and the set top boxes service providers. The media houses included; The Standard media group (Kenya Television Network - KTN), The Nation Media (Nation Television - NTV), Kenya Broadcasting Corporation (KBC),

Kenyatta University Television (KUTV) and Kenya Television Service (KTS), based in Nairobi.

4.3.1 Interview with Media Organizations

This was done between March 21 and June 6, 2016 and 15 media managers and editors were interviewed drawn from different media organizations. The organizations included; KTN, NTV, KUTV, KTS and KBC.

The researcher sought to find out the implication of digital migration to media houses**.** In an interview with the first participant from KTS dated 21st March, 2016 at 8:00 Am, the study revealed that KTS for instance had applied for a television license and frequencies in 2007. This was KTS' response:

> While the Ministry of Information and Communication which is responsible for licensing gave us the license, the regulator asked us to wait for the country to start migrating. While the Ministry had completed preparations to migrate through a technical committee, the existing commercial television stations went to court to block the migration. Part of their argument was that they had invested heavily on the analogue transmission infrastructure and that the country did not need to migrate straight a way since the world regulating body ITU had given up to 2015 for all countries to have migrated.

For KTS then, the digital migration had been long awaited. KTS was finally given a temporary permit to broadcast on March 2013. KTS was a Moi University hosted channel, bringing in a totally new model of broadcasting. The digital migration brought with it the chance for the country to experiment with different models in terms of content and niche segments of audiences.

This is evidenced with the provision of diverse and segmented channels which are fit for diverse audiences. For instance;

The KTN's Farmers TV. It is a segmented channel committed to empower and equip farmers for more yields by disseminating agricultural content and the business part of farming. The channel is a 24-hour channel specialized in agriculture and agribusiness. It is owned and operated by Kenya Television Network (KTN) under the umbrella of Standard Group, a multimedia company.

The channel basically attracts individuals interested and passionate about farming and also, farmers who desire to increase knowledge on farming and influence their behavior and attitude towards agribusiness.

Secondly, EDU channel is a resourceful academic center for learners owned by the Kenya Institute of Curriculum Development (KICD). As the first digital education channel in the country, it broadcasts educational content factoring in the needs of learners across, from secondary to primary schools at the comfort of their homes.

EDU channel television broadcasts diverse educational content that kids can use to excel academically.

In Kenya, the channel is an invention that is evolving and is gradually replacing traditional classroom interaction learning. This was more effective especially during the 2020 Corona Virus Pandemic where all schools were shut to contain the virus.

Students in Kenyan can access EDU channel on free to air platform on Signet for an endless learning experience. Additionally, live content on KBC English Radio Service or through the Institute's official portal at kec.ac.ke, learners who for one reason or the other have no access to television set can access the content via smartphones or similarly can watch the channel live stream content on YouTube.

These are examples of segmented channels among others that attract specific advertisers, hence, making it easy for the segmented channels to find their market. Segmentation of the channels has enabled the media to meet the diverse needs of their audiences as per the theory used in this study where audiences choose specific media channels to gratify their needs.

On the same note, several other broadcasters got interested in broadcasting after the launch of the digital migration, bringing in multiple broadcasts. It means that the Kenyan television is now varied and competitive in terms of ideas, programming, adverts and therefore in business aspects and journalism.

Nonetheless, there is a need for increasingly higher content, and media companies are developing unique ways to meeting the needs of their audiences.

The researcher noted from the second participant that currently there were three categories of media houses in existence in Kenya;

1. The big-league channels made up of mainly older stations with a tight grip on advertising revenue. These include Citizen Television, Nation Television (NTV), and Kenya Broadcasting Corporation (KBC).

2. The second category are the big stations experimenting into new market design. These media stations include channels such as KTN NEWS, KTN Burudani, Y254, Farmers TV and the vernacular television stations. Basically, they are channels emanating from the older television channels.

3. Finally, there were totally new upcoming stations such as KUTV, KTS, and the 5TH Estate channel among others. These were future game changers of broadcasting in Kenya because of the specificity of their intentions and the freed audience of the future that was specific in their quest for content and gratifications.

However, among these new station, majority had often been blocked or switched off for non-payment of signal distribution charges that sustained them on the digital platform, some had ended up being shut in totality due to the digital transmission cost.

On the cost of digital broadcast, the interviewee stated that;

> It is important to refer to the country's policy on broadcasting. Its thrust is to greatly increase variety of voices and to have broadcasters participate in the country's journey into the future. The fact is that new players who are upcoming media stations may not immediately have the economic strength to pay the one million shillings plus monthly charges to the digital signal distribution platform.

He further stated that;

> It is painful to see individuals and organizations who have invested quite heavily to start their broadcast channels switched off for good because of the burden of this monthly payment. It would be good if there was a grace period for such stations to be given a lower payment rate as they introduce themselves to the digital media market. For the older stations, the amount is negligible.

From the research findings, the researcher noted that the transmission cost is an issue to be looked at especially on the upcoming and small television stations. From the observation, there was closure of small TV stations such Pwani TV from the national television platform, this is because they were unable to keep up with the latest trend of digital broadcast. This resulted from not being able to sustain the station due to lack of financial strength. Reviewing the cost of transition would help small media houses to survive the digital broadcast platform.

During an interview with the Acting Director, Kenyatta University Television (KU TV) & Radio Services (Kenyatta University) dated 13/04/2016 at 2.32 PM in his office; the researcher noted that from the study, digital migration means the following to a broadcaster;

i For older stations, migration meant a loss in monopoly. Fewer broadcast houses no longer control increasing shares of the high media revenue rank. Besides, the old stations, stiff competition has remained among them, yet the uproar of the new stations adds to the competition. The upcoming of new television stations has encouraged segmentation of the audiences. This has become easy for advertisers to get their specific audiences in these segmented channels. For instance, advertisers for agricultural products are likely to easily reach their specified audiences through Farmers Television channel – a channel that basically attracts audiences interested in acquiring knowledge on farming.

ii Unprecedented competition. This has led to loss of revenue for old media houses due to competition arising from emerging media houses due to digital broadcasting. Digital broadcasting has enabled many players to enter the media broadcasting business because the cost for setting up media stations had come down in comparison to the initial analogue broadcasting that needed much input in setting up infrastructure.

iii Migration meant loss in investment for older stations based on the analogue infrastructure hence the need for more capital injection into procurement of digital compatible equipment. Before digital migration the analogue broadcast required much investment of infrastructure across the country in order for a specific channel to be accessible in different part s of the country. The more the infrastructure in terms of installation of boosters and other transmission equipment the higher the visibility of a channel hence, individual media houses had invested much to ensure their visibility. With the coming of digital broadcast meant, media houses required to disband the analogue transmission equipment which were considered a loose by media industries.

iv The old stations have been able to apply for more frequencies to start additional stations for instance KTN HOME has added other sister stations; KTN News, KTN Burudani and the KTN Farmers Channel. All this is part of the media strategies that will enable them to maintain their market shares in terms of revenue and also attract and maintain their audiences. The older

> stations have been able to move quickly to online television. Hence, the need for more investment in Internet infrastructure and Internet service provision because digital broadcasting is highly dependent on the Internet for distribution of TV content. It is easy to use social media platforms directly by the stations and cheaper means of accessing broadcast quality content, especially via social media, that can directly be aired on TV. The Online television as a strategy enables audience to watch their favorite programs at the comfort of wherever they are.

Digital migration allowed all television stations to benefit from low cost digital technology in terms of cameras, live coverage equipment or editing facilities.

This is in comparison to the analogue broadcasting. During analogue much investment was needed on infrastructure which determined the channels coverage or visibility. Revising broadcasting models to narrowcasting, this has become a viable option for many media houses, as they now focus on niche audiences that they can gain after the digital migration.

The researcher also sought to find out if digitization has affected television viewership after the migration.

The participants agreed that Yes, digital migration has affected television viewership. During an interview with NTV on 22nd April, 2016**,** the first participant revealed that;

> Digital or online journalism in a Television station has become a contemporary form of journalism where editorial content is distributed via the Internet, as opposed to broadcasting via Television. The primary product of journalism,

> which is news and features on current affairs, are disseminated through digital media technology besides the traditional television broadcast. The online platforms used by television stations in the recent past may include the company's Website, YouTube channel, Linked in, Facebook among others.
>
> Audiences can access video clips of latest events online, watch live events or an event, news or programme that was aired earlier can be watch at a later time anywhere via the internet, this can be accesses on any internet connected gadget including mobile phones.
>
> Television viewers can access full footages through links prepared by television stations, they have the ability to save the latest news, event or programs and watch much latter at their convenience. This means audiences are faster informed, more informed comprehensively and the content is retrievable several times and available outside the broadcast hours.

The second participant stated that;

> Since digitization enabled the opening of many TV and radio channels, older media houses have lost some viewers to other new media houses breaking the media monopoly in terms of viewership in the media industries in the country. Viewers now have diverse television channels to choose from hence variety of content.

Just after digital transition in Kenya, TV stations experienced a drop.in viewership which increased several months after the migration. Those who had not acquired Set Top Boxes yet, opted for radios for source of information which in most cases were cheap and available even on phones. Others resorted to watching TV from other households as they planned to buy decoders. Years later, many had acquired Set Top Boxes and Integrated televisions.

Digital facilities made every stage of production and transmission much faster and a great surge of live transmission content made available to viewers and permitted viewer interaction/ participation.

For instance, during live shows, audiences gave in their feedback on time and could an streamed either through the internet or as the latest trend, most media houses hosted in live events on their channels hence audiences were able to watch live events on real time.

The low cost of digital technology in comparison to analogue broadcast meant a station could place live transmission equipment in many parts of the country for transition at the same time. Also, the low cost meant that new stations could come on board and broadcast. Since most of these stations had target niche segments of the audience, their content was likely to be more thorough and empowering more the media consumers.

Digital migration enabled the availability of many more frequencies, allowing the emergence of new stations including vernacular broadcasting channels, hence, this catered for the diverse needs of television audience. The vernacular channels were easier to comprehend for the locals, bring content closer to home, bring the voices of their own worldview, tell jokes and bring entertainment which was humorous and gratifying to the locals.

Digitization also enabled a good number of television audiences to become producers and active participants on social media platforms. They were able to produce audio and video contents. This demystified broadcast content production and participation as broadcasters; use such social media platforms as leads to potential news/news sources for broadcasters.

About challenges Digital migration imposed on audiences, the interview with KTN dated 29th April, 2016**, t**he first participant stated that;

> The migration lays a foundation for a vibrant television sector with great benefits to audiences rather than challenges. However, the impact of the migration to audiences is inevitable, and as such, there are no everlasting challenges for audiences, except the initial investment in the set top boxes and subscription charges for content. This has affected viewership of our content especially those from the lower socio-economically class. Even with these challenges we are optimistic that CAK will address the issues that has emanated from digital migration.

The researcher noted that there are set top boxes which require no monthly subscription, however, many audiences had initially bought the ones for subscription since free to air decoders came later. The researcher noted that the prices of free to air decoders were still high especially to low income earners. Not all could afford while some lacked the consistency in subscribing for channels.

The participant further said that;

> Some companies came up with lowest packages which can be subscribed to even daily but it is till a challenge to some. The distress is how much the decoders cost and if the cost is within the purchasing power of consumers. This implies that if the cost of the set top box is maintained at an affordable level, it will accelerate the uptake of information via their TV sets. We have few broadcasting stations who have fallen victim of using social media content without cross checking their truthfulness, subjecting audiences and making them vulnerable to fake news, manipulation and victims of propaganda.

Therefore, since content is key in digital broadcast media, with the multiple television channels, it is important for journalists to adhere to the code of ethics when sourcing for news on the social media platform before airing the content.

Upon finding out challenges media houses face resulting from digital migration in Kenya, an interview dated on 6thMay, 2016 with two participants from Kenya Broadcasting Corporation (KBC**)** revealed that;

> Multiple channels meant more intense competition for audiences. For bigger stations, it has enabled them to maintain or to grow their incomes while for the smaller stations; it is a matter of life and death.

This has been evidenced where bigger stations strategized in order to stay relevant and afloat in the media market. One of the techniques used by larger television stations, such as Kenya Broadcasting Corporation (KBC), is the introduction of a new television station for young people, as well as the launch of a series of county TVs.

Y254 is a wholly owned subsidiary of KBC, a television station that caters to the country's rising youthful population, which is undeserved by mainstream television.

The station broadcasts entertainment such as music, movies, soap operas, and other programmes with a youthful content. On the contrary, the new upcoming television channels have to work extra hard to penetrate the market and this has seen some of them being shut down for not being able to sustain themselves.

There was loss of revenue for many media houses due to competition arising from multiple channels available after the digital migration. Multiplicity of television channels enabled many players to enter the media market, hence the big channels that did not diversify their content by segmenting their audience as discussed above suffered a challenge of revenue loss due to competition from other media houses.

For all stations, there is greater staff mobility and turnover.

Staff mobility gives employees the chance to visit another institution for a brief period of time, experience different cultures, and exchange knowledge with colleagues in the media practice. Through the use of this management model, positions could be filled by assigning an employee with one functional situation to a different service or another functional situation to the same or different service. On the other hand, staff turnover saw a number of media employees leave media companies and needed replacement in a set amount of time. All these models were part of strategies used by media organizations to restructure towards the adoption of the digital broadcast aggravated by digital migration.

The researcher established that those with satellite dishes could watch many more international channels offering diverse content. In a short while, it was possible to access these by everyone else and the attraction that media houses had with the soap operas would soon disappear. The challenge would be to invest in local serial and series productions.

The future market was much more unpredictable in terms of audience preferences and affinities. The 90% of the participants said there was a great need for great investment in production of media content with the required standards. This was attributed to high cost of content production and low investment in content production. Investing in content production would help the nation realize tangible development because relevant content from the media is an important determinant of national development.

The researcher noted that there could be a growing information disparity between low income earners and high-income earners, further supporting the notion that the cost is a

barrier. The financially stable can afford to access information from numerous and diverse channels compared to vice versa. This support the argument on the knowledge gap theory where it states that the more one is economically empowered the more chances of accessing diverse information. This is unlike during analogue era where citizens were entitled to the standardized television content which was free to all.

The researcher found out that the financial implication of digital migration is a challenge and a limiting factor to media houses especially the upcoming TV stations. Although it was cheaper than analogue broadcast, a majority of media houses fell victims for their signals being disconnected for long period by signal distributors for failure to pay for the signals. With the high cost of transmission, some and upcoming local channels found it a challenge to sustain themselves on the digital platform hence they got on and of air indefinitely while others completely disconnected.

In the media houses, online media democratized the flow of information that was previously controlled by the traditional television broadcast. However, the positive side of it is that this lowered distribution costs. Online journalism had fewer barriers to entry, and the various computer networking technologieselevated widespread practice of digital journalism.

When media houses had a bone of contention with the Communications Authority of Kenya, it was evidenced that media houses eventually got shut down during the digital transition period and this left audiences with blank screens, not able to gratify their quest for information as per gratification theory.

4.3.2 Interview with Communications Authority of Kenya (CAK)

The researcher did an interview with Assistant Director of Multimedia Services ated 1st April, 2016 in his office. The researcher got a deeper insight on the background and the period of digital migration in Kenya in relation to access of information on television sets among television audiences. The researcher noted that the Kenya Information and Communications Act, 1998 established the Communications Authority of Kenya as the regulating authority for Kenya's communication sector in 1999.The organization is in charge of developing information and communication technologies like broadcasting, multimedia, electronic commerce, telecommunications, postal and courier services.

The CAK was in charge of licensing, managing the country's frequency spectrum and numbering resources, defending consumer rights, type-approving communication equipment, and making communications services available to all. The interview revealed that the migration did not just happen. It begun way back in December 9th 2009 with the digital transition awareness campaign. To meet the global deadline of June 2015, the country transited to digital in phases across the country.

The Communications Authority of Kenya hosted Digital Kenya secretariat which assisted the transition by responding to consumer enquiries on digital migration. The Commission also conducted several consumer awareness campaigns. It included holding forums with various stakeholders, issuance of Public Notices and Press Releases, TV and Radio talk shows, advertisements, showcasing in trade fairs and continuous response to public and media enquiries.

KBC (Signet) and Pan African Networks Group (K) Co Ltd were licensed by the government as signal distributors. In December 2009, then-H.E. President Mwai Kibaki launched a pilot DVB-T signal provided by SIGNET in Nairobi and its vicinity.

Despite the government's efforts to prepare for the changeover, media corporations were unprepared for analogue switch off. They sometimes blocked attempts to cut off the analogue broadcasts resulting to continuous court fights hence the delay in digital transition. Battles arose due to the foreseen competition from other media houses that would be incorporated in the digital platform after the migration. This was because frequencies were open to accommodate more channels and this meant stiff competition in terms of advertising revenue.

On the provision of Set Top Boxes/ decoders, the interviewee noted that;

> CAK does not control the prices of the decoders; however, we lobbied the government to remove import duties-tax during the 2012-2013 financial year. Secondly, they opened the market to encourage many vendors to venture into decoder business, this liberation ensured low cost of business. Thirdly, they waived the registration fee for all decoder vendors. Finally, the certification fee was lowered from Ksh. 10,000 to Ksh. 4,000. When the transition began, decoder prices were going for up to Ksh.15000 But now lowered to as low as 1600 depending on consumer's preferences.

On accessibility, the researcher was informed that;

> Digital migration did not mean that Kenyans pay for content. This is media propaganda. Just before migration we had simulcast, both analogue and digital technologies operating concurrently. This allowed consumers to experience both technologies before the transition. After transition, consumers were left with an option to choose what's convenient for them; pay TV, free to air decoders or Integrated TV for free to air channels. Integrated TV were initially 42' inch and above, however, smaller inches are now available.

On this view, the researcher noted that the issue on the ground is that the government cannot ignore the fact that there is financial implication of the digital migration regardless of audiences being given an option of choosing their mode of accessing content. Simply because, participants had earlier claimed that they would go for free to air but the prices of free to air decoders were still costly, the subscription were high and the prices of the integrated television as well.

The interviewee further stated;

> I may not be satisfied by how we transited, we had a very clear roadmap to follow in order to migrate smoothly which we never followed. We had so many court battles with the major media houses and this caused a delay. We could have done much better if we followed the roadmap we had planned for years after many consultations; however, I'm delighted we finally transited.

Also it was emphasized that;

> Other countries are emulating Kenya and we are being invited to other countries to share our success stories in regards to the digital migration. Countries like Rwanda and Tanzania are yet to fully realize digital migration. Initially, Kenya purchased first generation equipment and later upgraded to second generation, unlike Rwanda and Tanzania who are still on first generation, implying that when they upgrade to second generation, they'll be required to change their decoders as well.

In terms of the advantages, it was revealed that;

> During analogue, an individual media house had to cater for and invest in their own infrastructure. Each media company had booster/transmission towers in different parts of the country which determined the visibility of the channels. The more the transmission towers the more visible they were. Currently, these services are done by signal distributors, reducing on the cost of transmitters, power and manpower – engineers – hence reducing on cost of transmission.

This helps broadcasters to focus on content development by utilizing their resources to provide relevant, local content to the viewers. Digital transmission allows more channels

and content. Viewers can access a wide variety of local and international channels because the signals use less bandwidth and allow for the broadcasting of more channels on the available frequency.

TV sets can also access radio platforms thanks to set-top boxes' ability to access radio frequencies. Due to the availability of decoders, this convergence of media does not necessitate the purchase of a radio set. A Set Top Box can interface with multiple devices, including memory cards, cell phones, and internet modems, in addition to receiving digital signals. This feature enables viewers to access a wide range of services and information. From the research findings, there is specification of media houses e.g. channels for farmers, health, sports, religion etc. This has made it easy for advertisers to get specific audiences. Television has been personalized with Electronic Program Guide. This allows ease to navigate between channels and identifying current and future screen programs.

Initially, specific few were on air. However, with the liberalization of the media; other talents get an opportunity to manifest their skills and talents. Whatever content an artist has will always have an audience provided the content is in line with the requirements provided by Kenya Film Classification Board. The interviews further revealed that Kenya has 85% coverage with the coming of digital migration, unlike analogue at 54% coverage.

About the challenge faced during the digital migration, it was revealed that;

> Financial implication was a challenge. “Initially we were to be funded by the government however funds always got diverted to other pressing issues in the

> country. However, we are mobilizing the government to grant us funds from the Universal Service Fund (USF) to roll out network projects especially to regions that are considered not economically sensible.

He further stated that;

> Misconception and misinforming audiences about the digital migration from the word go by the media houses was a great stumbling block. Most people believe in media and since media have a wider coverage, audiences were misguided about the migration.
>
> Our adverts and educative documentaries were rejected by the media and we found ourselves blocked from major media houses. However, we opted for other alternatives to educate audiences. Kikao Kikuu was one of the initiatives of educating the public, roadshows, and our 'digital Kenya' website.

Kenya had implemented Digital Video Broadcast Technology from the start (DVB-T). However, due to technological advancements, the government changed the model to DVB-T2 in December 2010. In comparison to DVB-T, DVB-T2 has higher sound and picture quality, has greater channel capacity, covers a larger geographic region, has improved security features, and supports high standard definition, mobile TV, and digital audio.

4.2.3 Interview with Decoder Service Providers

The interview was done between May 13 and June 3, 2016 (Star Times, Zuku, Go TV, DSTV and Bamba TV). Digitization of television is one of the fundamentals of globalization that has facilitated the world being a global village, making events of day to day to be on real time. The digital migration was globally enforced due to technological changes that keep on advancing with time.

Five interviewees were interviewed from the above service providers. The interview was guided by interview questions to come up with comparison of the services they offer. The account of the interview yielded the following responses:

a) Interview with Zuku Branch Manager in the office dated May 13, 2016 at 9:00am.

The interview revealed that, "Zuku primarily targeted the upper class, but the middle class can now afford it due to its diversification of its products". According to the findings of the survey, Zuku provides a selection of local and foreign channels, which are classified into bouquets that are priced differently.

There are four bouquets available on Zuku Satellite TV: Zuku Smart, Zuku Classic, Zuku Premium, and Zuku Asia. Zuku Smart offers 34 TV channels for Ksh399 a month. Zuku's classic bouquet, which includes 71 TV channels, costs Ksh 999 per month. The monthly cost of the premium bouquet, which includes 98 TV channels, is Ksh 1, 399. In addition, Zuku Asia costs Ksh999 per month and offers 27 Asian channels.

The researcher noted that the prices had been readjusted and priced as follows:

> Zuku Poa had 53 TV and 51 radio channels for Ksh. 899 a month. Zuku Classic, which included 74 TV channels, 51 radio channels, and local TV channels, was available for Ksh1, 299 a month. The monthly cost of the premium bouquet, which included 97 TV channels, 51 radio channels, and all local channels, was Ksh. 2, 399. At last, a 27-channel Asian package costing Ksh 999 per month was offered.

"In addition to the channels provided, there is also free phone service and fiber internet that requires one to be connected to Zuku fiber in order to get phone and internet services," the researcher was told. "Zuku operates differently; while some decoders, like Gotv, require a normal aerial to function, ZUKU is a satellite TV that requires a satellite receiver to access its channels," the interviewee emphasized.

The research revealed that language barrier was a challenge. Clients who are foreign and those mostly in the rural set up got dissatisfied when calling the customer care center for help. Their clients raised a concern that the subscription packages offered included channels that may never be watched by audiences.

b) Interview with Star Times Branch Manager in the office dated May 20, 2016 at 9:00am.

From the interview, the researcher noted that Star Times is a Chinese product founded in Beijing in 1988.

According to the study, there are three different kinds of decoders: combo, pay TV, and free to air. Pay TV channels are grouped into bouquets that include a combination of foreign and Kenyan TV stations; however, the selection is not as extensive as it is on DSTV or Zuku.

The first Pay TV: It is bouquet of Nyota TV which entails monthly subscription of Ksh.259, a weekly subscription fee of Ksh. 86 and Ksh.22 for daily subscription. The second bouquet is Basic; this has a monthly subscription fee of Ksh.599, a weekly subscription fee of Ksh.200 and a daily subscription fee of Ksh.50. The third bouquet is

Classic. This has a monthly subscription of Ksh.999, Ksh.333 weekly and Ksh.83 daily. Finally, Unique bouquet has a monthly subscription of Ksh.1, 499, Ksh.500 weekly and Ksh.125 daily.

Free to Air Channels: This is a decoder that once bought; it does not require subscriptions hence the channels displayed are free to view. This contains 55 + free to view channels and also accommodates pay subscription. The set-top box retailed at Ksh. 4399. "If you want to switch from your current Star Times to Pay TV, you can pay a one-time fee of Ksh. 2500 and become a fee-to-air subscriber," the manager noted.

Combo: The researcher noted that Combo is a type of decoder that uses both the satellite dish and aerial (terrestrial) unlike free to air and pay TV. The price of the decoder alone goes for Ksh.2499 while a full kit consisting of a decoder, satellite dish and aerial goes for Ksh.3999. It also has packages as follows; the first package is *Nova and Nyota* which entails monthly subscription of Ksh.449, a weekly subscription fee of Ksh.150 and a daily subscription fee of Ksh.37. Secondly, *Smart and basic*, this entails monthly subscription of Ksh.899, weekly charges of Ksh.300 and Ksh.75 for daily subscription. The third one is *Super and unique.* This entails monthly subscription of Ksh.1499, Ksh.500 weekly and Ksh.125 daily. The fourth one is *Chinese* with a monthly subscription of Ksh. 1999. This includes all channels + 12 Chinese channels. Finally, the *Indian*, it requires Ksh. 899 with all channels + 9 Indian channels. Only *Smart* and *basic, Super* and *unique* have radio channels.

c) Interview with DSTV Branch Manager in the office dated May 27, 2016 at 9:00am

DSTV is an example of cable television which is a common broadcasting system in the western world offered by Multi-Choice Africa. The television programming is basically on subscription. It contains both local and international channels and one requires a satellite dish to get access to the channels.

> DSTV is considered for the high class because of its high subscription charges compared to other decoders in the market. DSTV retails at Ksh. 6000 with monthly subscription ranging from Ksh.950 to Ksh.7900 a month from the previous range of Ksh.1050 to Ksh.9400 a month.

The researcher was informed that DStv has five bouquets; DStv Premium, DStv Compact Plus, DStv Compact, DStv Family and DStv Access.

DStv Premium; this has more than 115 channels with a monthly subscription of Ksh. 7900.

DStv Compact Plus; has over 100 TV channels subscribed at Ksh. 5200 per month.

DStv Compact; this package has over 90 channels subscribed at Ksh. 3200 per month.

DStv Family; It contains over 70 TV channels at a monthly charge of Ksh. 1900

DStv Access; has over 60 channels at Ksh. 950 per month.

Below are the initial DStv Packages and their rates.

Table 4.2 DStv Packages

DStv Bouquets	Bouquet Monthly subscription (Ksh)
DStv Premium	9,400
DStv Compact+	6,400
DStv Compact	3,750
DStv Family	2,150
DStv Access	1,050

The interview revealed that "the cheapest DStv package initially was DStv Access with a subscription of Ksh. 1,050 per month. It provided access to over 65 channels".

> Currently, we have gone for as low as 950 monthly subscriptions with over 60 TV channels just to expand our market.

d) Interview with *GOTV* Branch Manager in the office dated June 2, 2016 at 9:00am

GOTV is offered by Multi-Choice Africa. The set-top box retails at Ksh. 1500. It has four packages: GOtv Max, GOtv Plus, GOtv Value and GOtv Lite.

GoTV Max offers a variety of over 45 international and local channels at Ksh.1, 299 monthly subscription.

GoTV Plus has a broad selection of over 40 international and local channels across all genres with special focus on movies, sports and kids at a monthly subscription of Ksh. 699.

GOtv Value has a combination of over 26 international and local channels with a monthly subscription of Ksh. 470.

GOtv Lite; This offers over 18 international and local channels. It allows a monthly subscription of Ksh. 260, quarterly subscription at Ksh. 590 and Annual subscription of Ksh. 1,500.

The most expensive monthly subscription is Ksh. 1,299, while the cheapest is Ksh. 260.Go TV offers both free and paid television. Pay TV requires a monthly payment, and if you do not pay, your channels will be turned off. According to the researcher, GoTV receives its signal through a satellite dish, and Zuku and Star Times are the only two suppliers whose clarity is pure HD.

d) Interview with *BAMBA TV* Sales Representative on June 3, 2016 at 9:00am

To have an understanding of Bamba TV services, the interview revealed that the Bamba decoder has a One-off fee of Ksh. 3,600. and that Bamba is a free to air decoder.

Types of decoders that Bamba has includes; Bamba CA, BAMBA CA1 and Bamba CA2.

The disadvantage they had so far was that “due to pressure from our competitors, some agents are misleading clients that the decoders are not functioning yet in most cases it depends with where audiences are tuning from”.

The researcher noted that by the time this thesis was submitted Bamba TV decoders were no longer in the market.

4.2.4 Strategies for Effective Access to Information after Digital Migration

The fifth objective, the researcher intended to propose strategies from the study findings that would enhance accessibility of information via television sets after the digital migration. From the study, the following strategies were recommended; Kenya successfully migrated to digital broadcasting in 2015. However, from objective 3, majority of participants attributed their challenges on the financial implication of digital migration imposed to them in comparison to the analogue broadcast.

Before the introduction of free to air decoders, most participants had already purchased decoders that needed either monthly, quarterly or annual subscription however most participants especially the low income earners said they found the free to air decoders which came later to be expensive”. “We recommend the government to come up with effective strategies that will ensure lower prices of set top boxes”.

Despite the fact that the prizes of pay TV or subscriptions being lowered by most service providers, much more needs to be done in order to make access to information affordable to all. For instance, ‘‘StarTimes which was most used was considered cheap and has a package that goes for as low as Ksh.20 for a daily subscription, is still a

challenge to low income earners. This is from the results of the research findings that some pay TV audiences would go without watching their television or watch inconsistently due to failure to subscribe". While some enjoy access to diverse content, others are often left out even with what is considered the cheapest subscription hence, the need to ensure subscription fees are subsidized the more or scraped off completely to make TV content affordable to all category of audiences financially stable and unstable alike.

Also, for the pay TV subscribers, it has been noted that for every package subscribed, most of the Channels given to audiences are not watched. The study therefore recommends for an option where audiences are at liberty to select their specific favorite channels. This will make audiences get value for their subscription without having imposed channels they never watch.

From the researcher's observation, once a package had been subscribed for, whether the audience had not watched or tuned on the TV for that particular day, week, month or year depending on the type of services offered by a particular decoder, the deductions or payments are permanent. Hence, the study recommends that signal distributors should be lenient enough to allow audiences to enjoy services they have paid for as they consume content and should not be charged if they have not watched for a period of time.

In the current Kenya where audiences enjoy access to diverse content, signal distribution services do not penetrate in some regions. As a result, information disparity is inevitable. The study recommends the Government through CAK to roll out a

programme that will ensure installation of transmission towers in these regions and places mostly considered not commercially viable. Besides, signal distributors should offer effective service ensuring stable signals in areas with unstable or weak signals. This will go a long way to elevate accessibility of information by TV audiences.

As previously stated, the viewer has access to numerous channels in the digital broadcasting environment. Relevant and high-quality programming is thus a significant determinant of digital broadcasting consumption, and thus an important determinant of a nation's progress. Unfavorable conditions for content production are one of the difficulties in broadcasting industry in Kenya and many other countries. Many factors contribute to this, including a lack of resources, skills, talent, and the market. Although attempts to promote content development in the country have begun, more needs to be done. As a result, more government intervention is required to guarantee quality content development is prioritized as a key component of the digital migration plan.

In addition, the Government has to foster more cooperation with media industries in building capacity in content production. By building concerted efforts, the pace of content generation will increase. In addition, the government should lay down strategies that will lower the cost of content production. This will help media houses to sustain their audiences and stay relevant in the digital platform. Content creation has the potential to become a strategic industry for Kenya, particularly in terms of job creation, cultural conservation, promotion and exportation, and the development of local talent. As a result, more private-public partnerships should be formed to encourage the development of local content in Kenya.

More channels mean diverse content to be consumed. In order to avert consequences of inappropriate content or content which are not up to standards, vetting of programme or regulation is vital. With the efforts of the government empowering Kenya Film Classification Board to regulate local content, more needs to be done on the regulation of both local and foreign content hence giving an opportunity to resound Kenya's culture and moral values. It is also essential for the user to be able to control the content to be viewed or to request the content viewed on screen.

The government should consider giving scholarships to graduates from media institutions to attend highly specialized digital broadcasting training program overseas. This will equip media institution to effectively upgrade and meet the standards digital broadcast presents.

In addition, offer manuals and guidelines for training in learning institutions, this will ensure quality in all level of trainings offered to journalists in the country. This will equip media practitioners to produce relevant and quality content and meet the demand that comes with the digital broadcast.

Media houses should put in place training programs that adopts digital broadcasting techniques. The training should take the form of apprenticeships in cooperation with content producers. Additionally, they should be given incentives from the government to sustain such programs.

Public understanding of digital TV platforms is crucial for effective transition process and consumption of content. From the study, consumers especially those in the rural set

up still need well-designed information campaign on variety of services in the market in regards to digital migration. Adequate civic education will enable audiences to get rid of misconceptions previously made against digital broadcast. The study therefore suggests that with any innovation there needs to be adequate information in languages best understood by locals in order to hasten smooth transition. Since it is not the role of the government alone to inform audiences, The CAK and the media should take the responsibility to ensure more media consumers are well informed.

4.3 Summary

This chapter has presented, analyzed, interpreted and discussed data that were collected through questionnaires distributed to TV consumers living in Kesses Sub County and interview conducted with the media experts; Communication Authority of Kenya (CAK), Media practitioners (from KTN, KBC, NTV, KUTV and KTS) and the set top boxes service providers (DsTv, GoTv, Zuku, StarTimes and Bamba TV).

The study has examined alternative sources of information among Kesses residents' accessibility of information on Television Handsets after the migration, the challenges emerging from digital migration in relation to information access and has proposed strategies for improving access to information by TV audiences after digital migration. Importantly, the study assessed access of information by TV audiences holistically and in the process revealed gaps that need to be addressed as discussed in the subsequent chapter. The next chapter gives the summary, conclusion and recommendations of the study.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This Chapter contains summary of the research findings and conclusions based on the research study. It also contains recommendations for practical and sustainable implementation that will elevate access to information on television handsets in Kenya.

5.2 Summary of Findings

Objective One: To Determine the Preferred Sources of Information among Kesses Residents

Television is a popular medium among the participants. As per the findings of the study, consumers possibly preferred it because of the audio visual aspect of it. Alternatively, consumers opted for Radio, newspaper and internet use respectively as sources of information. This was due to challenges that came along with digital migration such as the financial implication to television content consumers.

Objective Two: Establish Accessibility of Information on Digital Television

The information acquired from the respondents indicated that although consumers were able to access content on their television sets, it was not consistently consumed as it were before the migration hence limited the accessibility. This was due to financial constraints imposed to television content consumers ranging from the subscription charges and high prices of decoders and intergraded televisions.

Consumers selected decoders and packages they were comfortable with, for instance a majority opted for Star Times simply because it had the cheapest and flexible subscription that could be subscribed yearly, quarterly, monthly, weekly and even daily. Unfortunately, even with this being the cheapest, some consumers still failed to subscribe even to the lowest package consistently.

Most consumers would sometimes not access their television for failure to subscribe, hence a number of them resorted to other sources of information like radio which was always readily available even on phones.

For audiences on pay TV, they preferred to be given a variety of channels from which to select channels instead of channels being imposed on that they rarely watched. This would make audiences have great value for their subscription.

Objective Three: Analyze Challenges Emerging from Digitization of Television and Information Access in Kenya

From the study findings, several challenges that emerged from digital broadcast after digital transition affected audiences and media houses, Since the arrival of television services in Kenya in the early 1960s, majority of Kenyans enjoyed free to air TV content, however, after the migration, Kenya transited from free to air TV to pay TV resulting into protests against the migration by media owners when Communication Authority of Kenya announced the digital transition date to be December 31st, 2013.Three media houses, the Royal Media Services, Nation Media Group and the Standard Group went to court to oppose the proposed analogue switch off date. This was

considered a desperate move to protect their investments for instance infrastructure, and to move the government to protect free to air TV channels and ensure access of free to air channels to audiences.

Audiences had to face the financial implication of the migration in order to watch. The study revealed that some decoder owners had tried to lower the cost of their set top boxes and subscriptions which still some could not afford. They even made the mode of payment flexible from annual, quarterly, monthly, weekly and daily payment. Some audience preferred daily subscription to watch because it was what they could afford, of which some days they went without subscribing hence they could not watch their TVs. It meant that audiences who were receiving Television signals at no cost had to pay the price and invest in the decoders, some, the integrated TV and also subscription to TV model e.g. DSTV, GoTv, Zuku, Azam etc.

The set top boxes which required no monthly subscription were in the market when many audiences had already bought the ones for subscription but still found the prizes of free to air decoders high. The digital migration demanded some changes in the reception of signals where audiences were either to buy a decoder (set top box) to connect to their existing analogue TV in order to continue watching or purchase a Television built-in with a digital tuner. However, due to lack of adequate information, some audiences discarded their analogue TV sets.

Some participants had less knowledge on various decoder services in the market. Several of them needed to be educated more on the subject in their vernacular. Therefore, the study recommends that with any innovation there needs to be adequate

information in languages best understood by locals in order to hasten a smooth transition. After the migration viewers had to pay for TV programming unlike before unless they acquired the free to air set top boxes which came way later and without a variety of channels and had to be purchased, and yet their prices were considered high to some.

The Media Council of Kenya reports that since the digital transition, consumer adoption of digital signals has increased. A significant portion of Kenyans were, nevertheless, deprived of information during the implementation period as they saved money for integrated TV sets, decoders, and subscription fees. This implied that audiences were unable to gratify their needs as per the theory of uses and gratification used in this study. This clearly resonates with the findings of the study where a section of the population mostly low income earners found it a challenge to watch due to financial implication of the migration. This left some audiences on the wrong side of the information divide which the government needs to look at in order to foster accessibility of digital content on the digital broadcast platform.

Diversification of channels offer a wider range of information. Local languages are now being broadcasted hence diverse content. Today, broadcasters may reach audiences that were previously excluded due to language and signal distribution issues, such as northern Kenya. An informed population is more likely to contribute to the economic growth process in any given society than an uninformed public. However just as the usage and gratification theory portrays, inability to access information via television

handsets simply implies that audience are not able to gratify their needs and this calls for the government to make efforts to ensure accessibility of Television Handset.

With the advent of diverse channels, content Regulation has become a challenge especially with foreign channels. As previously discussed, the diversity of channels has its challenges for instance, difficulties in regulating improper content from international sources. Meaning the regulation of content cannot be very specific in terms of programming. Although the Kenya Film Classification Board has its mandate to regulate, however it is limited. Therefore, the ability of the user to regulate the content viewed through features on the set top box or remote will most likely result in more self-regulatory approach.

Therefore, Media Council of Kenya and concerned stakeholders should emphasize on self-regulation and empower viewers to be discernible, wise and critical of media content. A sociological and communication framework called "cultivation theory" looks at how media, particularly television, affects people's lives over time. The fundamental tenet of cultivation analysis is that, in comparison to individuals who watch less television, those who watch more television are more likely to view the real world as more frequently portrayed in television messages. In order to investigate the potential impact that television media may have on viewers, cultivation theory was created. George Gerbner (1973) Emphasize on self-regulation as it will ensure audiences are protected from illicit content. This relates to uses and gratification theory where

audiences are regarded as active participants therefore they are responsible to choose the content to consume and what not to consume.

As far as new technological advancement in the media is concerned, there is need for decentralization of customer care services for set top box service to the local level especially on phone call to enable consumers access their customer care needs effectively. Customer knowledge more specifically, knowledge from customers is the foundation for customer satisfaction (Aghamirian et al., 2015). This will increase customer satisfaction, which is crucial because it shows whether your target audience in this case, audiences approves of the work your company is doing. High customer satisfaction, according to research, boosts lifetime value, improves customer retention, and improves brand reputation. Long-term, this boosts customer loyalty and increases company referrals.

Unstable signal is one of the challenges that need to be looked into in order to foster access to information to audiences across the country and beyond. Challenges resulting from digital migration in Kenya;

Feedback from key informants who were media experts indicated the following challenges media houses face in regards to digital migration as captured on page 75 to 78.

- Multiple channels mean more intense competition for audiences. For bigger stations, the challenge is to maintain or to grow their incomes. Smaller and

upcoming stations need more efforts to sustain themselves on digital platform.

- The future market is much more unpredictable in terms of audience preferences and affinities.
- Audiences can access international events without relying on local stations since Digital migration allows access to diverse international channels.
- Loss of revenue for majorly older or major media houses due to competition arising from many players in the media business.
- Changing some of the equipment used in broadcasting during analogue by older media houses, hence the need for more capital injection into procurement of digital compatible equipment.
- Need for more investment in internet infrastructure (cabling and servers, for example) and Internet service provision because digital broadcasting is highly dependent on the internet for distribution of TV content.
- Most upcoming new stations are often switched off now and then for non-payment of signal distribution charges by the national digital platforms. This is attributed to the cost of transmission which is a challenge to most upcoming media houses that may be unable to sustain themselves on the digital platform.
- Need for great investment in production of media content with the required standards. This is attributed to high cost of content production and low investment in content production.

Objective Four: Proposed strategies for improving access to information via television sets and recommendations.

From the study, analogue and digital broadcast are incomparable due to the implications they have. The benefits of digital broadcast however out ways the demerits, therefore the study recommends the government to ensure universal access to information by averting the financial implication imposed to audiences.

With the country's high level of unemployment and poverty, it is evidenced from the study that most Kenyans may be unable to buy free-to-air set-top boxes. The issue is if something is not done to salvage the poor after digital migration, audiences will not access the information, television stations will lose their audience to other means of accessing information and business will be disrupted thus creating technological gaps that may become a stumbling block.

The government should attempt to control the cost of set-top boxes for Kenyans and other viewers in order to solve the problem, as many unemployed people and those living in poverty cannot afford these devices and need to use their televisions to access information.

According to the study, the government shouldn't put a high tax on these goods to encourage the public to buy them in large quantities. Besides, review the prices of decoder, smart television and subscriptions. Audiences should be given freedom to select channels they most watch which will ensure value for their subscription money.

This will in the long run provide a solution to a situation where audiences are given channels not of their preference which they least watch.

The study recommends that with any new innovation there needs to be adequate information to audiences who are content consumers in languages best understood by locals in order to hasten smooth transition.

To elevate universal access of information, the study recommends CAK to hasten a roll out program that will ensure installation of transmission towers in the regions that are mostly considered not commercially viable or ensure stable signals in areas where the signal is unstable or weak. This will enhance accessibility of information by TV audiences. Besides the CAK to demand from signal distributors signal strength in areas of broad cast which ensures that the signal is stable.

For any successful transition of an innovation, there is need for cooperation of both stakeholders toward achieving a common goal regardless of their interests. Because the transition necessitates political commitment at the highest levels of government, the policy framework should be adaptable enough to allow regulators to amendment the regulatory framework as needed to accommodate market, consumer, and technology realities.

The researcher noted that in the near future all new television sets will be digital with no need for the decoders. This means television with decoders may be phased out of existence globally. If this will happen then, the cost of purchasing the digital television should be much lower to make it affordable to all.

Government should ensure the cost of media production is lowered for more content development. Customer care services especially for the set top boxes should incorporate local and foreign languages in order to cater for the need of their customers.

From the findings, this research is in line with uses and gratification theory that emphasizes that the needs of the content consumers who are the audiences is what drives different audience to select media content for consumption. Additionally, consumers are considered active participants meaning they have all the authority to select the content they are in need of. In order for audiences to satisfy their needs, media stakeholders should ensure the accessibility of the content by audiences via digital television Handsets and avert financial constrains brought by the digital transition. The transition to digital broadcast can help the needs of audiences and bridge the digital divide only if the media content is accessible. By increasing accessibility to diverse information to public, audience get to gratify their needs as per uses and gratification theory. However, this can only be effective if the government ensures the affordability and accessibility of the information by averting the financial implication of the migration to especially the low income earners in the society.

5.3 Conclusion

The focus of the study was accessibility of media content by consumers via television sets after digital transition. From the study, some audiences were caught off guard which Communication Authority of Kenya needs to look at and ensure accessibility of the information.

With the implantation of digital transition in the country, consumers and media stand to gain from it. The migration has been successful but there are media consumers/ households who are often unable to access information on their television sets due to the financial constraints of the migration. Therefore, it is necessary to note a number of the stated challenges that needs to be addressed in order to foster equitable accessibility of information via digital TV Handsets by majority of citizens.

Information disparity is clearly foreseen and audiences unable to gratify their needs through media, since some audiences are unable to access their television screens while others have access to more information or content. Based on the country's economic status, the more an individual or community is informed, the greater the knowledge gap is narrowed and the needs of audiences are met to satisfaction. This makes it necessary for government to ensure that everyone has access to information.

The expanding information inequality between low and high income earners supports the view that financial status is a determining factor towards access to information. This implies that diversified channels do not necessarily mean effective accessibility of information. In the aftermath of the technological revolution, no media organization can afford to ignore digital broadcasting. Yet, all Kenyans must be included and given access to television. broadcast via their TV sets including the marginalized regions, the low income earners and economically disempowered people in the society.

5.4 Recommendations

1. The study recommends the engagement of both stakeholders who are Communication Authority of Kenya, the Media Council of Kenya, and the Media Owners when introducing new Inventions in regards to media broadcast.
2. Public participation should be considered to ensure a balance in improving communication and majority ideas to be incorporated in the preparation of new technologies to enhance smooth transition.

3. The findings on the delay of digital migration due to several court cases by the major TV stations could imply that there were no prior preparations and perhaps change was imposed on them and the country by the global decision makers. This global decision not only caused change and disruption to core institutions of the nation but had drastic effects at the very village level and particularly negative effects on the economically disempowered. It was paradoxes that while the digital technology associates with opening up and freeing of information, globalization does not necessarily have the economically disempowered in its concerns. Therefore, the study suggests that the Media Council of Kenya to consider the economically disempowered in their efforts to bring technological advancements in the near future.

4. Before and in the awake of the digital transition period media houses broadcasted contradicting information about digital migration and this conflict between the media houses, Communication Authority of Kenya and the Media Council of Kenya left media consumers misguided about digital migration.

Therefore, media houses who are the authoritative reliable source of information should adhere to code of ethic in reporting without bias even if they are an interested party to the technological changes made.

5. An adequate simulcast period should be considered by the government when executing technological changes in the media industry. This could have been necessary to facilitate especially the digital transition up take and minimize consumer disruption during digital transition period hence provide time for regulators and industry to address the anticipated challenges following the migration.

6. Government intervention and management is required to drive the digital transition process. Yet, a market-led approach alone seemed unlikely to achieve universal digital broadcast coverage. As a result, adequate protected funding should lay the groundwork for long-term planning and support a smooth transition such as the digital migration and other technological advancement in the near future.

5.5 Suggestion for further research

For further research, more studies need to be done on the access of information by television audiences in Kenya on a wider scale other than Kesses Sub County.

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APPENDICES

APPENDIX I: INTRODUCTION LETTER TO PARTICIPANTS

Dear Participants,

I am a Master of Science student [Journalism and Mass Media studies] in the school of Information Sciences, Moi University carrying out a research on the effects of access to Digital information by audience in reference to Kesses Sub County.

The purpose of the questionnaire and in-person interview is to gather data for the aforementioned study as part of the requirements for the Master of Philosophy in Journalism and Media Studies degree.

The information collected will be handled with the utmost confidentiality and used only for academic research purposes. You will be able to obtain a copy of the final copy upon request.

Your assistance will be greatly valued.

Thank you.

Yours faithfully,

Shivoko N. Lily.

Email address: **lilyshivoko@gmail.com**

APPENDIX II: QUESTIONNAIRE FOR THE RESIDENTS OF KESSES SUB-COUNTY

This questionnaire is to gather data for purely academics purpose. The study seeks to investigate the effects of digital television on access and use of information with special reference to Kesses Sub-county, Uasin Gishu County, Kenya. Every piece of information will be handled discreetly. Please do not add your name or any other identifying information to these surveys. The findings of this research will be used to recommend applicable strategies that will ensure affordability and accessibility of information via digital television to both high and low income earners in Kenya.

SECTION A: PARTICIPANT'S BIO-DATA

The background information is mentioned in this section of the questionnaire. I understand that the questions in this section are sensitive, but the data will let me compare participant groups.

Please [ ] tick

1. Age
    a) 20-25 years [ ]
    b) 26-30 years [ ]
    c) 31-35 years [ ]
    d) 36-40 years [ ]
2. Gender
    a. Male [ ]
    b. Female [ ]

3. How would you describe your economic status?

a. Above average [ ]

b. Average [ ]

c. Below average [ ]

d. Unemployed [ ]

4. What is your occupation? .....

SECTION B: DIGITAL MIGRATION AND INFORMATION ACCESS

The purpose of this questionnaire section is to examine your knowledge of Kenyan television digitization. It is split into three sections.

Please tick what applies to you.

Part 1: Access to Information via television

1. What is your preferred source of information?

a) Radio c) News paper e) Others ……

b) Television d) Internet

2. Are you well versed with various services offered by Decoder/Set Top Box service providers in the market?

a) Yes [ ] b) No [ ]

3a. Do you access information via your TV handset daily?

a. Yes [ ] b. No [ ]

3b. If no, Why?…….....

4a. Do you use Television set box / decoder?

a.Yes ( ) No ( )

4b. Which type of decoder do you use? …….....

a) GoTv,
b) Bamba TV,
c) AZAM,
d) StarTimes,
e) DsTV,
f) Others

4c. How much did the preferred decoder cost you?

4d. Is it a pay TV or free to air decoder?

4e. Do you pay monthly subscription fee in time? If no, why?

4f. How much do you pay as a subscription fee?

4g. Why do you prefer the above decoders?

……

……

5a Do you use integrated Television? (TV that does not need decoder)

……
……

5b Give reason for your answer above?

6. What is your opinion of the prices of set top boxes?

a) Affordable [ ]

b) Expensive [ ]

7. Which channels do you prefer? Kindly underline

a. Locals-Citizen, KTS, KTN, KBC, KUTV, YOUTH TV, NTV.

b. International- CCN, ALJAZERA, SUPERSPORT, TELEMUNDO.

c. Any other channel? .....…….

……

8. What's your comment about the provision of specified channels you subscribe to? …….....

…….

Part 2: Socio Economic Issues

9. What challenges do you face while accessing information on your TV handsets? .....

…….

10. Are set top boxes affordable to all? Yes or No, Explain your answer?

……
……

11. what is your advice to the government about provision of set top boxes?

……
……

SECTION C: DIGITAL MIGRATION AWARENESS AND DIGITAL SET TOP BOXES

1. Do you think the government prepared audiences adequately for migration?

a. Yes [ ] b. No [ ]

2. Please explain each

……..……

……..

3. Which medium do you use frequently to get information?

a) Television [ ] c) Newspaper [ ]

b) Radio [ ] d) Internet [ ]

4. Why do you watch television?

a) For entertainment [ ]

b) Education [ ]

c) Information [ ]

d) All the above [ ]

5. How frequently do you watch TV?

a. Daily [ ] d. Never [ ]

b. Weekly [ ] e. Occasionally [ ]

c. Monthly [ ]

6. What is your opinion on pay TV?.....

7. On average, how many channels do you watch frequently out of range provided?

a) 1-4 c) 10-14

b) 5-9 d) More

8. Do you think the channels given when you subscribe is worth your money?

a) Yes b) No

8b. kindly explain?

……..……

……..

Thank you for taking your time and effort to complete this questionnaire

APPENDIX III: INTERVIEW FOR BROADCASTERS

Name of the Media house: ……..

Time:……

Date:……

1. What does digital migration mean to a broadcast media houses? …….

…….

2. Do you think digitization has affected television viewership? Please explain your answer. ……..

……..

3. If yes in which way? ……..

4. What challenges has Digital migration posed to audiences? ……

……

5. Are there challenges media houses face due to digital migration in Kenya? …….....

……

6. What is your comment on the affordability of decoders/set top boxes? ……...

……

7. What do you think needs to be done to ensure affordability and accessibility of information by TV consumers via TV handsets? ……

……..

Thank you for taking your time to share your views

APPENDIX IV: INTERVIEW GUID FOR COMMUNICATION AUTHORITY OF KENYA INTERVIEW

1. Are you satisfied with the entire digital transition process in Kenya?

2. What is your opinion on the financial implication of digital migration and access of information by audiences via television handsets in Kenya? ……..

……..

3. Are you contented with the manner in which consumers especially those in the rural are informed and educated on products available and their usage? ……..

4. Do you believe the benefits of the migration process will be fully realized by the general public especially the rural dwellers and low income earners in Kenya? …

…….

5. Are you confident in regards to quality from the signal distributors? ……..

……

6. Have you explored further subsidy mechanisms such as Tax incentives in order to lower the retail prices of decoders/set-top boxes? ……

……

7. What is your comment on information Disparity after the digital migration? …….
……
8. Are you confident in the Quality from the signal distributors? ……
……

9. Challenges the commission faces with digital transition? …….

……

10. Are you satisfied with the method in which media consumers are educated on services offered by different decoder service providers and their usage? …….

…….

Thank you for taking your time to share your views

APPENDIX VII: INTERVIEW GUID FOR SET TOP BOX SERVICE PROVIDERS

Time:…….

Date:…….

1. Which brand are you representing? ……

2. What does digital migration mean to you as a company? .....

3. What services do you offer as far as digital TV is concerned? …….....

……..

4. Do you think audiences are fully aware of the diverse set top boxes on the market and their service options? ……..

5. What challenges do you face so far in regards to digital migration? …….

…….

6. What are the roles of consumers as far as digital transition is concerned?

……..

Thank you for taking your time to share your views