

**USE OF THE INTERNET TO ADDRESS LOCAL COMMUNITIES'
COMMUNICATION NEEDS: A CASE OF THE CATHOLIC DIOCESE
OF ELDORET**

BY

**A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF A MASTER OF SCIENCE
DEGREE IN COMMUNICATION AND JOURNALISM,
DEPARTMENT OF COMMUNICATION STUDIES,
SCHOOL OF HUMAN RESOURCE DEVELOPMENT**

**MOI UNIVERSITY
ELDORET**

2014

DECLARATION

DECLARATION BY THE STUDENT

This Thesis is my original work and has not been presented for a degree in any other institution of higher learning.

Signature Date

Ndirangu Monica Wahu
SHRD/PGJ/09/08

DECLARATION BY THE SUPERVISOR

This Thesis has been submitted with our approval as University supervisors.

Signature..... Date

Name: Dr. Charles O. Ong’ondo
Senior Lecturer
Department of Communication Studies,
School of Human Resource Development,
Moi University.

Signature Date

Name: Prof. Jackson K. Too
Senior Lecturer
School of Education,
Moi University

DEDICATION

Dedicated to my dear mum, Elizabeth W. Njoroge, who has always been my great source of encouragement.

ABSTRACT

The internet has been used enormously to address communication problems at the global, regional and national levels. However, the extent to which it has addressed communication needs within given local communities has not been emphatically established. This study investigated the use of the internet to address the communication needs of the Catholic Diocese of Eldoret community. The objectives of the study were: To identify the communication needs of the community, examine the use of internet among the community, determine the extent to which the internet addresses the communication needs of the community; and to establish the potential benefits and constraints of internet use among the community. Two post-modern theories of mass communication influenced the study: The theory of Communication Technology Determinism and the Information Society/Age theory. The quantitative approach and the survey method were used and data was collected mainly by use of questionnaires. The cluster random and purposive sampling techniques were used to select respondents. Data was analysed using descriptive statistics and findings presented in both statistical and graphical means. The main finding of the study is that the community's internet use is very low, ranking fifth among other media applied by the community to address their communication needs. This low degree of use is attributed to various constraints, mainly unavailability. The study revealed that full application of the internet could reduce by almost 80% the communication problems being experienced by the community. The study has made important recommendations to address this situation and made suggestions for further inquiry. The study will hopefully be significant in improving communities understanding of the use of the internet in addressing the communication needs of members. This may in turn lead to better application of the medium by the community and other similar ones.

ACKNOWLEDGEMENTS

Many people helped towards my accomplishment of this research project and I remain sincerely grateful for their assistance.

My heartfelt gratitude goes to the AMECEA Social Communications Commission for their support of this study, through his Lordship Rt. Rev. Cornelius Korir of the Catholic Diocese of Eldoret. I am also deeply indebted to Fr. William De Veale of St. Patrick's Missionary Society for his initial support which enabled me to embark on this study.

I owe much gratitude to my lecturers at Moi University especially my supervisors, Dr. Charles O. Ong'ondo, Head of Communication Studies, School of Human Resource Development, Moi University and Prof. Jackson K. Too of the School of Education, Moi University, who have walked with me and guided me towards the realisation of this project. Their invaluable guidance throughout the research cannot be overstated.

I acknowledge and highly appreciate the assistance of the parish priests of Burnt Forest, Cathedral, John XXIII, Kapsoya, Kaptagat, Majengo, Moiben, Tembelio, Turbo and Ziwa Catholic parishes where I conducted my investigation. These include Fathers Patrick Kemboi, Geoffrey Mwanda, Julius Sigei, Oliver Barry, Philip Kinyanjui, Joel Wafula, David Chebii, Francis Moriasi, James Saina, Ambrose Bett, Gilbert Mburu and Kenneth Yego.

My profound gratitude goes to the faithful of these parishes who acted as respondents for my research. To all others not mentioned here who assisted me in one way or the other, feel truly appreciated.

TABLE OF CONTENTS

Declaration	ii
Dedication	iii
Abstract	iv
Acknowledgements	v
Table of Contents	vi
List of Tables.....	ix
List of Figures	x
Operational Definition of Terms	xi
CHAPTER ONE	1
INTRODUCTION TO THE STUDY	1
1.1 Introduction	1
1.2 Background to the Study	1
1.2.1 Catholic Diocese of Eldoret.....	1
1.2.2 Local Communities’ Communication Needs.....	2
1.2.3 Internet Use among Local Communities	2
1.3 Statement of the Problem	4
1.4 Objectives of the Study	5
1.5 Scope of the Study	5
1.6 Limitations of the Study.....	6
1.7 Significance of the Study	8
1.8 Conclusion.....	7
CHAPTER TWO	10
LITERATURE REVIEW	10
2.1 Introduction	10
2.2 Development Communication.....	10
2.3 Communities’ Communication Needs	12
2.4 Internet	13
2.4.1 Internet Use by Communities	14
2.4.2 Factors Controlling Internet Use by Communities	16
2.4.3 Potential Benefits of Internet Use to a Community	25
2.4.4 How Internet use by Communities could be Enhanced	31
2.5 Theories of Communication Relevant to Internet Use	34
2.6 Research on Internet Use by Communities	38
2.7 Conceptual Framework.....	39
2.8 Conclusion.....	31
CHAPTER THREE	42
RESEARCH METHODOLOGY	42
3.1 Introduction	42
3.2 Research Approach.....	42
3.3 Research Method	42
3.4 Study Area.....	43
3.5 Population and Sampling	44
3.6 Research Instruments	46

3.7 Data Analysis	47
3.8 Validity and Reliability of the Study	48
3.9 Ethical Considerations in the Study.....	49
3.10 Conclusion.....	38
CHAPTER FOUR	51
DATA PRESENTATION AND INTERPRETATION	51
4.1 Introduction	51
4.2 Background Information on the Participants	51
4.2.1 Membership of Respondents	51
4.2.2 Gender of Respondents	52
4.2.3 Age of Respondents	53
4.2.4 Education Level of the Respondents.....	54
4.2.5 Respondents' Designations.....	54
4.3 Community's Communication Needs.....	56
4.3.1 The Kind of Diocesan Information Needed Most.....	56
4.4 Use of the Internet within the Community.....	58
4.4.1 Point of Accessing Internet.....	59
4.4.2 Kind of Internet Connection Used	61
4.4.3 Frequency of Internet Use	62
4.4.4 What Internet is Used for/would be Used for within the Diocese	65
4.5 The Extent to which the Internet Addresses the Communication Needs.....	66
4.5.1 A Comparison of Internet Use and other Means of Communication.....	66
4.5.2 Communication Problems Experienced by the Community	70
4.5.3 Extent to which Internet can Solve Communication Problems	71
4.5.4 Preference of the Internet over other Means of Communication.....	72
4.6 Constraints and Potential Benefits of the Use of the Internet	73
4.6.1 Constraints of Internet Use in the Diocese	73
4.6.2 Potential Benefits of Using the Internet by the Diocesan Community	75
4.7 Conclusion.....	77
CHAPTER FIVE	78
SUMMARY OF FINDINGS, DISCUSSION AND CONCLUSIONS	78
5.1 Introduction	78
5.2 Summary of Findings.....	78
5.2.1 Local Community's Communication Needs	78
5.2.2 Use of the Internet among the Local Community.....	78
5.2.3 Extent to which the Internet addresses the Communication Needs	79
5.2.4 Benefits and Constraints of Internet Use within the Community	80
5.3 Discussion	82
5.3.1 Local Community Communication Needs	82
5.3.2 Use of the Internet among the Local Community.....	84
5.3.3 Extent to which the Internet has Addressed the Communication Needs	88
5.3.4 Constraints and Benefits of Internet Use among the Community	91
5.4 Overall Conclusions.....	93
5.5 Recommendations.....	97

5.6 Suggestions for Further Research.....	98
5.7 Conclusion.....	75
REFERENCES	101
APPENDICES	105
APPENDIX I: DESCRIPTION OF THE CATHOLIC DIOCESE OF ELDORET.....	105
APPENDIX II: UASIN GISHU COUNTY MAP.....	106
APPENDIX III: PARISH CLUSTERS.....	107
APPENDIX IV: QUESTIONNAIRE.....	108
APPENDIX V: LIST OF RESPONDENTS.....	111
APPENDIX VI: RESEARCHER’S INTRODUCTION LETTER.....	112
APPENDIX VII: INSTITUTION’S INTRODUCTION LETTER.....	113
APPENDIX VIII: RESEARCH AUTHORIZATION.....	114
APPENDIX IX: RESEARCH PERMIT.....	115

LIST OF TABLES

Table 3.1 Sampling Frame	45
Table 4.1 Kind of Diocesan Information Needed Most	57
Table 4.2 What Internet is Used for or would be Used for within the Diocese	65
Table 4.3 Means of Communication within the Diocese.....	67
Table 4.4 Extent Internet can Solve Communication Problems within the Diocese .	71
Table 4.5 Preference of Internet over other Means of Communication in the Diocese	73
Table 4. 6 Constraints of Using Internet to Communicate within the Diocese	74
Table 4.7 Internet Rating in Relation to Various Aspects	76
Table 5.1 Summary of Findings.....	81

LIST OF FIGURES

Figure 2. 1: Conceptual Framework.....	40
Figure 4. 1: Respondent's Designation.....	55
Figure 4. 2: Point of Accessing Internet	59
Figure 4. 3: Frequency of Internet Use.....	62
Figure 4. 4: Reasons for Frequency of Use.....	64
Figure 4. 5: Communication Problems within the Diocese	70

OPERATIONAL DEFINITION OF TERMS

- Deanery** – A group of parishes within a civil district in the Diocese, which are put together to promote efficiency, solidarity, unification, effectiveness and better pastoral care.
- Diocese** – The Bishop and all Catholic faithful who reside within the Bishop’s See (jurisdiction or area for which the Bishop is responsible), together with their institutions and establishments.
- Faithful** – The people of God who are incorporated into Christ through baptism.
- Internet** - A vast network of telephone and cable lines and satellite systems designed to link and carry information worldwide through computers.
- Lay people/laity** – Faithful or people of God who are not sacred ministers or clerics.
- Local Information** – Information belonging to or connected with the particular area or people being talked about.
- Communication Needs** - the requirements to produce, to disseminate, to access and to share problem solving information for daily living.
- Community** – A group of people who live in a particular area and share some things in common e.g. religion.
- Development Communication** – Pragmatic and purposive communication which seeks positive change in all areas of human development.
- Parish** – A community of Christ’s faithful stably established within a particular Church.
- Parish Priest** – The proper pastor of the parish entrusted to him.
- Parish Council** – A group of faithful in a parish with designated roles.
- Religious Congregation** – A society of consecrated members who pronounce public vows and live a fraternal life in common (Nuns and religious Brothers).

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 Introduction

This initial chapter introduces the study by providing the background and context of the study, the problem statement, objectives, scope and limitations. The significance of the study is also explained in this Chapter.

1.2 Background to the Study

The following sub-section provides some background information on the Catholic Diocese of Eldoret, local communities' communication needs and on internet use among local communities with reference to the study community.

1.2.1 Catholic Diocese of Eldoret

The Catholic Diocese of Eldoret consists of the Bishop and all the Catholic faithful, including the clergy, religious and laity, who are baptised and reside within the Bishop's see, together with their institutions and establishments (The Catholic Diocese of Eldoret Third Master Plan: 2012-2016).

The Diocese is situated in the vast Rift Valley Province of Kenya and towards the northern side, North Rift (Appendix I). It covers the counties of Uasin Gishu, Nandi and Elgeyo Marakwet (The Constitution of Kenya 2010) with a total area of 9,254 square kilometres. The Diocese is divided into seven deaneries, which are further divided into 44 parishes which are administrative units in the Church. The Catholic population is approximately 490,000 out of a total population of 2,017,142 (2009 Kenya National Census) people in the Diocese.

The Diocese's vision is to be an instrument of God's love, peace and reconciliation in society. (The Catholic Diocese of Eldoret Third Master Plan: 2012-2016). To attain this, the Diocese engages in various activities which are both spiritual and physical. Some of the spiritual activities include administration of sacraments such as baptism, solemnising marriages, ministering to the sick and offering counselling services. On the other hand physical activities involve peoples overall well being such as health, education, agriculture, water and sanitation, technical training, microfinance, justice and peace, among others.

1.2.2 Local Communities' Communication Needs

The terms 'local communication needs' are used to refer to the requirements of the Catholic Diocese of Eldoret as a community to produce, to disseminate, to access and to share information locally within the community's geographical boundaries. Such include sharing information among community members and access by community members to useful local information like pastoral, social and development information within the sphere of the Diocese. Local communities' communication needs revolve around companionship with other human beings (Quebral, 1981) at the local level.

1.2.3 Internet Use among Local Communities

The need for human beings to communicate has seen the emergence and evolution of various means of communication over the years, ranging from the ancient traditional means to the modern, and to the post-modern new technologies. Internet is one of the latest communication media to emerge in the post-modern era and is the subject of this study. A lot has been written about the internet as one of the new media technologies that has expanded by great length the means of communication. In

theory the internet presents a myriad of opportunities for communication over the older media (Poster, 1999). However, in practice, these opportunities are sometimes not fully exploited due to some impediments that accompany the use of this medium among local communities like the problem of access and technological expertise, among others. Consequently, this slows or hinders development in the said local communities.

The universal Catholic Church is involved in many human development initiatives and has encouraged her members all over the world to adopt the new media technologies like the internet in order to achieve their development goals. Pope Benedict XVI (2009) observed during the World Communications Day, “New media technologies, like the internet, should be accessed and used by all communities in the world for their good. These technologies are supposed to be at the service of human socialisation and information at all levels: global, national and local.” The Catholic Diocese of Eldoret is a part of the universal Catholic community engaged in many development activities at the local level and thus the employment of new media technologies to meet their communication needs at the local level is imperative. This need is clearly articulated in the Catholic Diocese of Eldoret Communication Policy (2010) and the Catholic Diocese of Eldoret Third Master Plan (2012).

Despite this, the internet has not been utilised fully to serve the local community’s communication needs through enabling sharing of information that concern community members, providing access to useful local information and enabling participation in the decisions that affect community members. It is this concern that informed this study.

1.3 Statement of the Problem

Media technologies always present great potential and opportunities for communication and interaction every time they emerge. This is true with the modern media innovations like the radio and television, and more so with the new media technologies like the internet. However, there is a great challenge when even after the emergence of such wonderful media innovations, communities continue to experience communication problems at the local level as their communication needs are unmet. This problem arises when communication is not purposively done or goal oriented as development communication dictates. Identifying the communication needs of a community and accessing and understanding the communication medium/channel to be used to address these needs go a long way to achieving the desired results of communication, that is, bringing about positive change to society. As a result, despite wonderful media innovations, communities continue to experience communication problems locally which could be easily solved by the emerging media if applied properly at that level.

The Catholic Diocese of Eldoret as a community has unique communication needs that have not been fully addressed by the various communication media in use currently as the community continues to experience various communication problems such as delays in getting information, getting incorrect information and/or lack of access to important information at all. This is despite the emergence of new media technologies like the internet which could address these problems if fully exploited. The community has not used the internet to any significant extent to address her unaddressed communication needs despite its potential benefits over other media due to some impeding factors.

In view of the above, this research aimed at investigating whether and how the internet had been used to address the communication needs or solve the communication problems within the Catholic Diocese of Eldoret community. The specific objectives of the study are stated below.

1.4 Objectives of the Study

- i) To identify the communication needs of the Catholic Diocese of Eldoret community.
- ii) To examine the use of the internet among the community of faithful in the Catholic Diocese of Eldoret.
- iii) To determine the extent to which the internet addresses the communication needs of the community of faithful in the Catholic Diocese of Eldoret.
- iv) To establish the potential benefits and constraints of internet use among the community of faithful in the Catholic Diocese of Eldoret.

1.5 Scope of the Study

This study set out to identify the communications needs of the Catholic Diocese of Eldoret as a religious local community. Therefore the study confined itself only to those communication needs related to the community's spiritual and pastoral activities. In terms of the media used to address those communication needs, the study focused only on the internet as one of the post-modern/new media technologies.

Geographically, the study was conducted within the geographical area covering Uasin Gishu County (see map, appendix II) or Eldoret Deanery, as referred to by the community, within the Catholic Diocese of Eldoret. There were five deaneries in total

within the Catholic Diocese of Eldoret, others being Keiyo, Marakwet, Nandi North and Nandi South.

The study targeted a population of 490,000 out of which a sample of 400 respondents were sampled. These belonged to 10 different parishes that were randomly sampled out of the 17 constituting Eldoret Deanery with every parish having 40 respondents representing different groups in the community. These included: one priest, two catechists, six teachers, four health workers, six youth leaders, three heads of learning institutions, six parish leaders, six committee leaders and six brothers and sisters.

In terms of methodology, the quantitative approach and the survey method were used to collect data from the target population with questionnaires being administered to the participants. The researcher confined herself to descriptive statistics of mean, frequencies and percentages in analysing the data collected from the field. More details are in Chapter Three.

This study was important in its defined scope as it has helped shed some light on the general situation on the ground. Further studies can be carried out to include more aspects that might have been left out.

1.6 Limitations of the Study

In terms of local communication needs, the study was limited as it only focused on the needs relevant to the particular study community, that is spiritual and pastoral needs, this being a religious community. However, the study acknowledges that members of this community also belong to other communities like agricultural or business and their needs would vary depending on the community. Another limitation of the study

was that it only investigated the use of the internet among the emerging media technologies despite there being others like the mobile telephone.

The study had limitations geographically because while the target community was the entire Catholic Diocese of Eldoret faithful, only a sample of the population was selected for data gathering in the expansive Catholic Diocese of Eldoret. Further, in order to limit the budget and work within the academic time schedule the study limited itself to Uasin Gishu County whereas the community is spread over three counties, the others being Nandi and Elgeyo/Marakwet. However, the sample is believed to be fairly representative having been randomly selected.

This study was also limited in terms of methodology employed. The employment of qualitative approach would have enriched the study by giving more revelations about the subjects under study in addition to the approach adopted here. For example, whereas the quantitative approach has established that rural respondents rely more on cybercafés to access internet than their urban counterparts, a qualitative approach would have gone further to find out if these cybercafés are situated in the rural areas or the people have to travel distances to the urban centres to find the cybercafés.

Nevertheless, despite these limitations, the study is still important as the study area was representative since it shares many characteristics with the entire target area while the population sampling was done to ensure it was representative. The methodology adopted was also appropriate for the large population and the expansiveness of the study area, thus ensuring validity and reliability. The quantitative approach is objective and unbiased and has provided hard facts which can

be relied on while the survey method has described the status of the subject under study as it is. The choice of descriptive statistics again has provided important foundation upon which other studies can be based. The methodology employed therefore helped in overcoming some of the limitations of the study.

1.7 Significance of the Study

This study is significant because it has provided information on the priority local communication needs of the Catholic Diocese of Eldoret community and this will help the community leaders to address the specific needs. The study has also identified the different communication problems being experienced by the local community and the challenges being faced by the community in employing various media including the emerging media technologies, particularly the internet, to address these problems.

This study is an important documentation on the unique communication needs of a given local community and has enriched the database and added to previous studies. The Catholic Diocese of Eldoret community, being a religious community, has its unique communication needs just like the agricultural, health, business and other communities that have previously been studied and documented.

The findings of this study are useful to the community leadership in their effort to ensure the community's communication needs are met by availing the necessary infrastructure and allocating adequate resources to communication. Other stakeholders and policy makers in the area of information and communication would also find this study useful with regard to media technologies adoption and use in

given local communities. This would help address some of the constraints of internet use identified such as access and affordability.

The study is also significant as it is informative to members of the Catholic Diocese of Eldoret and similar communities who have not adopted internet use as it could lead to its adoption and use to address the local community's communication needs. Good understanding of a new media channel improves its application as it encourages communities to apply it more, and this study will definitely improve the understanding of the internet in this particular community and in others.

The significance of this study to other researchers and scholars in communication is also enormous as they will undoubtedly find the information contained herein quite useful and inspirational.

1.8 Conclusion

In conclusion, this chapter has given a general overview of this study in terms of the context, problem statement and issues under investigation. It has clearly stated the objectives that guided the study and defined its scope. The study limitations have as well been explained in the chapter, despite which the study is still significant as demonstrated in the last sub-section on significance of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of literature related to this study. It defines the area of development communication in which the study is anchored and explains local communities' communication needs. The chapter expounds on the subject of internet use by communities and the various dynamics surrounding such use and how internet use by communities could be enhanced. Two theories of communication related to the study have been discussed: Communication Technology Determinism and the Information Society Theory. The Chapter also reviews some previous studies conducted in different parts of the world concerning internet use among communities and finally provides a conceptual framework indicating how the various factors discussed in the chapter interrelate.

2.2 Development Communication

Communication media have been used over the years for the purposes of development. This continued use of communication for development has led to the emergence of the field or approach of development communication into the general communication discipline. According to Bessette (1995) development communication is the planned use of communication strategies and processes with a view to development. The concept, he says, arose within the framework of the contribution that communication and the media made to development in the Third World countries.

The expression 'development communication', according to the Clearinghouse for Development Communication, was apparently first used in the Philippines in the seventies by Professor Nora Quebral to designate the processes for transmitting and communicating new knowledge related to the rural milieu (Ibid). Although the term was at first coined to refer to agricultural development, it is now used to take into account other areas of human development. Communication development seeks social change in the direction of higher quality of values of society. According to Kumar (2011), we should not view the goal of development communication purely in economic terms, but also in terms of social, political, cultural and moral values that make a person's life whole, and that enable a person to attain his or her full potential.

The World Bank Development Communication Source Book (2008) describes development communication as an approach which provides communities with information they can use in bettering their lives, which aims at making public programmes and policies real, meaningful and sustainable. Such information must address information needs which the communities' themselves identified. This way, this approach is meant to make a difference in the quality of life of communities.

Going by these definitions, many organisations who engage with communities with the aim of transforming them positively apply development communication in their daily communication activities. This is the case with the Catholic Diocese of Eldoret whose mission is spiritual and human development of the Diocesan community. Development communication is purposive communication, it is value-laden, and it is pragmatic (Kumar, 2011). It is goal oriented where the ultimate goal is a higher quality of life for the people of a society by social and political change. Effective

development communication entails a well-designed strategy which includes communication research to identify gaps/needs and choice of the best channels to disseminate information, among others. Kumar (ibid) singles out access to communication channels as one of the prerequisites of development communication. It is upon this background that this research was based: Identifying communication needs of the Catholic Diocese of Eldoret and the employment of the internet as a new communication channel/medium to address those needs for development purposes.

2.3 Communities' Communication Needs

In general, the communication needs of any community, be it local, regional, national or international, are those that revolve around companionship with other human beings, access to problem solving information for daily living, participation in the decisions that affect its members, access to education and culture that will develop individual capacities, and entertainment (Quebral, 1981).

Traditional and modern means of communication have been used to address such communication needs in Africa and elsewhere in the world. However, as changes continue to occur in communities and societies as a result of the rapid development in all sectors, newer methods of communication and media technologies must be used to keep the pace with the developmental changes. Colle (1995:462) captures this sentiment aptly in his article "Assessing Communication Needs for Development in Africa". He says:

From towns and villages in Kenya to the urban areas in Ghana, it is an age of communication, and this fact must be part of planning for health, food supply, environment protection and economic well being. We must look at some of the changes that are taking place in Africa and elsewhere to appreciate that applying traditional institutional approaches in development is no longer sufficient response to the needs of the 21st century.

Communication needs are no exception. Therefore, all communities ought to realise that although traditional and modern means of communications have served communities well in the past, the emergence of new technologies since mid 1960s cannot be ignored. In this era of information age it is imperative that communities everywhere in the world adopt these new communication technologies to their needs. The extent to which the community of the Catholic Diocese of Eldoret has done this was the subject of this inquiry.

2.4 Internet

Campbell, et al (2007) describes the internet as a vast network of telephone and cable lines and satellite systems designed to link and carry information worldwide. According to Morris (1996), the internet is a network of networks. It is a cooperatively run, globally distributed decentralised collection of computer networks that can communicate with each other electronically via telephone lines. McQuail (2000) on the other hand, defines the internet as simply a network of internationally interconnected computers operating according to agreed protocols.

The internet occupies a significant place in the new media technologies because of its ability to combine almost all other media like the radio, television, text, animation and visual. McQuail (ibid) observes that, in respect of the emergence of any new medium, we can at least recognise the claim of the internet to be considered as a medium in its own right. This is based on its having a distinctive technology, manner of use, range of content and services and its own image.

The internet is not only concerned with the production and distribution of messages, but equally concerned with the processing, exchange and storage. The new medium of

the internet corresponds with mass media primarily in being widely diffused, in principle available to all for communication and at least free (McQuail, *ibid*). The internet is therefore a network of interconnected computers that enable communication, that is, production and distribution of messages through telephone lines.

The Internet's pace of adoption eclipses those of all other technologies that precede it, although the technologies of earlier times were adopted in a much smaller population base. Radio, which was invented in the last half of the 19th century (1877) and attained full blown mass medium status in 1920s (Dominick, 1994), was in existence for 38 years before 50 million people tuned in. Television, invented in the late 1930s and achieved mass media status in the 1950s, took 13 years to reach that benchmark. 16 years after the first computer kit came out in 1951 (Baran, 2004), 50 million people were using personal computers. But when the internet was opened to the public use in the late 1960s and 1970s, it reached the 50 million user mark in only four years (Margherio, 1998).

2.4.1 Internet Use by Communities

Internet use varies from community to community and from individual to individual depending on many factors that control its adoption and use in different ways to meet the communication needs of the users. The internet presents a wide range of potential benefits over other traditional media, when properly used, because of its unique qualities. For instance, the internet has the potential to address many barriers to communication that the other media have failed to address. In order to fully reap the benefits of its use, internet use among communities should be encouraged and

enhanced because the more internet users there are in a given community, the greater the benefits of the medium in addressing communication needs. Metcalfe's law states that the value of a telecommunications network is proportional to the square of the number of connected users of the system (Whiteley, 2007). Little research has been done locally in this regard, that is, about the use of the internet by local communities to address their communication needs.

The use to which individuals put the internet into is largely dependent upon their choice. Internet uses range from the purely instrumental to effective and emotional ones (McQuail, 2000). For instance, internet video and telephone conferencing is largely confined to work contexts, while the facebook is used for emotional needs of meeting and interacting with friends.

Since the use of the internet is open to users, and open to innovativeness and creativity as Campbell, et al (2007) indicates, it is upon individuals and communities to adapt it to their local needs. This is because the use of the internet at the global and national or regional levels might not necessarily serve local information and communication needs. The study sought to find out how the internet had been adapted to the local communication needs especially serving the instrumental needs of information and intercommunication.

According to Campbell (ibid), the use to which new media are put can determine the direction of its future development. For example the mobile phone, another new media technology has taken different development routes at all levels: global, national, regional and local, depending on the use to which it has been put into.

Similarly the Internet has acquired many different uses since its invention, such as its use as a medium for commerce (e-commerce), advertising, social interaction for example face book and chat rooms, information source for example websites and blogs, business and academic discourse for example video conferencing, entertainment for example MP3 which is used for music, intercommunication such as email and short message service (SMS), among others. These different uses have defined the Internet, and as more uses emerge new definitions of the internet will emerge.

The internet, like all other emerging media, is still evolving and its full impact, and the expanding information highway, will evolve over time depending on how people use it. Most media evolve through various stages, which are initiated not only by the diligence of great inventors, but also by social, cultural, political and economic circumstances (Ibid).

McQuail (2000) supports this argument by saying that most new technologies have innovative potential, but the actual implementation always depends on two factors: (i) The operation of supervening social necessity that dictates the degree and form of development innovations and (ii) Law which acts as a brake on innovation to protect the social or corporate status quo. Media technologies or any other technology will therefore evolve depending on the use it is put into. This study will find out how the use of the internet has been defined within the Catholic Diocese Eldoret.

2.4.2 Factors Controlling Internet Use by Communities

A number of factors control internet use by communities and have been identified and documented in literature. Some of them are as discussed in this sub-section.

2.4.2.1 Access and Information Disparity

In assessing the level of internet access and its use to meet local communication needs, the issue of disparity which is a subject of heated debate in the post modern media era, will most likely emerge. People in some parts of the world are faced with constraints in accessing and using new technologies for their good, and media technologies are no exception. Such constraints arise from lack of material resources to acquire the new technologies and the lack of technical know-how for using such technologies (McQuail, 2000). In such instances, it becomes very hard for the people to adapt to the new technologies. They continue relying on the old technologies despite them being inefficient and even ineffective. This slows down development for such regions. When media technologies are involved, the result is inefficient and ineffective communication, creating a gap in information and knowledge gain among members of a community, hence the disparity.

Baran (2004:334) says this on the widening disparity between the technology ‘haves’ and ‘have-nots’ in the U.S.:

This democratization of the (Inter) Net still favours those who have the money to buy the hardware and software needed to access the Internet as well as pay for the connection. This leaves out many U.S. citizens – those on the wrong side of the digital divide.

The situation is no different in Kenya and other countries in the World as Internet access has been characterised by disparity among individuals and communities.

According to Campbell (ibid), the term ‘digital divide’ refers to the growing contrast between ‘information haves’ and ‘information have-nots’, that is, people who may not be able to afford a computer or the monthly bills for internet service connections. The digital divide is apparent across several demographic levels: income, education level,

race, ethnicity and age. Constraints of access include technological, financial, cultural, power, among others.

In the same way, communication structures and policies and the allocation of technology are factors helping to make some people 'information rich' and others 'information poor' at a time when prosperity, and even survival, depend on information (Foley, 2000).

The Government of Kenya appreciates the reality of this situation in the country. The National Information and Communications Technology Policy (2006), states that the lack of adequate Information and Communications Technology (ICT) infrastructure has hampered provision of efficient and affordable ICT services in the country. Access to ICT services is limited to a few major towns leaving out the rural areas of the country where most people live. There is therefore need to enhance universal access through, among others, developing knowledge sharing networks at grassroots level.

This means internet is not accessible enough to enable its use as a medium for information and intercommunication at the grassroots or local level, and where accessible it may not be used for communication at that level, that is at the community level or among the community members. On the contrary, where accessible the internet is mainly used to communicate at the global level with people in other countries or at the national level, but very rarely locally. This study will establish the real situation on the ground concerning the foregoing.

2.4.2.2 Ownership and Control

The internet began primarily as a non-commercial means of intercommunication and data exchange between professionals, but its more recent rapid advance has been fuelled by its potential as a purveyor of goods and many profitable services and as an alternative to other means of interpersonal communication (McQuail, 2000). The internet is not owned, controlled or organised by any single body, but is simply a network of internationally interconnected computers operating according to agreed protocols. Numerous organisations, especially service providers and telecommunication bodies contribute to its operation.

As the internet continues to evolve as a medium of communication governments, corporations, and private interests are trying to shape its operation. Nevertheless, answers to many questions remain ambiguous. For example: Who will have access to the internet and who will be left behind? Who or what will manage the internet and what are the implications for the future and democracy? The task for critical media consumers is to sort through competing predictions about the internet and new technology, analysing and determining how the new and improved information age can best serve the majority of citizens and communities (Campbell, et al, 2007).

Relative to most other media, the internet remains free and unregulated. It is thus an alternative avenue for those communities who have been denied the opportunity to use the old and modern media to meet their communication needs. McQuail (2000) thus remarks: At present we cannot say that new media are possessed by and used in the interest of a dominant class, even though there are class related inequalities of access and use and large corporations show great interest in acquiring property in new

media. A good example is the fibre optic cable network in Kenya which large corporations are competing to control for eventual profit gains through supplying it to the rest of the users.

As internet grows in success and use, there have been clear tendencies for its freedom to be limited. As it has become more like a mass medium, with high penetration and a potential for reaching an important segment of the consumer market, there is a higher stake in forms of regulation and management. It is increasingly becoming a medium for commerce, selling goods as well as information services. As with earlier media, once a claim to great social impact is made, the demand for control grows and the practical obstacles to control turn out to be so insurmountable (Gringras, 1997). This control becomes prohibitive to many communities in terms of access and the high costs that result from control. Whereas the internet was expected to be free and available for all as the network expands, the opposite is happening, as large corporations take over its control for commercial purposes.

Sussman (1997), basing his argument on the school of political economy, sees little to change a view of the world in which the chief beneficiaries of “electronic highways” will continue to be large electronic and telecommunication firms. The new media are no different from old media in terms of social stratification of ownership and access. It is the better off that first acquire and then upgrade the technology and are always ahead of the poor. The Internet is therefore far from free from control as envisaged. Nevertheless, compared to other media it is still more accessible and unregulated to a considerable extent.

2.4.2.3 Commercialisation and Affordability

One clear observation that has been made so far with regard to the internet is that it is becoming highly commercialised, just like the older and modern media technologies (Campbell, et al, 2007). The early history of the Internet has seen it evolve from a free tool and toy for students and academics to very serious big business in which applications are driven by expectations of profit. It will be 'free' only where this serves the purposes of commercial development (McQuail, 2000).

Campbell (2007) argues that the increasing dominance of commercial interests on the internet is affecting the way in which the information highway - once a non-profit, government subsidized medium known for freely accessible information - is evolving. Baran (2004) reinforces this argument when he echoes critics who argue that the internet will be no more of an asset to democracy than have been radio and television because the same economic and commercial forces that have shaped the content and operation of those more traditional media will constrain just as rigidly the new. He quotes Communication scientist Everette Denis (1992), who condensed the critics concern into two overarching questions, and poses:

- i) Will computer networks be readily accessible to all people, even if it means depending on institutions such as schools, churches and community organisations, or only to some?
- ii) Once the technology is in place and people have access to it, are they going to know how to use it? (Baran, 2004:334)

The above important questions will find answers in this study, even if not absolutely. This study will be investigating the level of internet access and its use by the people in the Catholic Diocese of Eldoret to meet their communication needs. Commercialisation of the internet has had negative impact on the medium touted as open and free. It has increased costs of access by all people and caused

inconveniences like individual's mail boxes getting clogged up with spam mail from advertisers.

Campbell (2007) warns that the increasing privatisation of internet services could threaten their continuing development as a democratic network of relatively equal individuals and institutions. All in all, there is still a big contrast in the budgets needed to start and run a broadcast or newspaper or magazine and that required for internet. The cost of internet access will still be low with high value.

2.4.2.4 Level of Education and Technology Literacy

Education levels and technology literacy are other factors that control internet use as use of the internet requires some level of understanding and literacy. One would at least need to know how to read and write to use the internet. In addition, education levels also have an impact on internet use as studies have shown. In a study on internet users in America, only 28% of those with less than a high school education use the internet compared to 57% of those with high school education, 79% of those with some college education and 89% of those with college degree (Campbell, 2007). In a report, "Promoting Internet in South Asia" (Mehta and Akhtar, 1999), low literacy levels was cited as a serious limiting factor to internet growth in South Asia.

This means that communities with high levels of literacy will more likely use the internet for communication compared with those with low levels of literacy. In other words, the use of the internet among communities could be an indicator of literacy levels among given communities.

2.4.2.5 Age

Studies done on internet use indicate that younger people are more inclined to use the internet than the older categories. For example, the study on Internet Users in America indicated that the younger adults, aged 18-29 years had an 84% of internet use while in older categories the percentage was lower: 76% for 30-49, 64% for 50-64, 27% for 65 years and above (Campbell, 2007). According to this study, a community comprising many older people will be less likely to adopt the internet compared to a community with many younger people.

2.4.2.6 Cultural Factors

Cultural factors among some communities have also been cited as impediments to internet use across gender, race and ethnic lines. Campbell (2007) quoting the *Christian Science Monitor*, (April 28, 2004) posits, “Many cultures see the Internet as an arm of Western Imperialism and as a bastion of pornography and consumerism.” He further argues that in some areas, it is culturally unacceptable for women to use technology.

Mehta and Akhtar (1999), writing in reference to gender as a factor in internet use in South Asia, propose locating internet kiosks at places where women congregate such as schools and health centres to make it easier for women to use the internet. It is therefore evident that cultural factors would control and determine how different communities adopt and use emerging technologies such as the internet, and cannot be ignored.

2.4.2.7 Communities' Internet Needs

Different categories of communities would have different needs of the internet depending on their unique needs. Some communities would have more need of the internet than others with regard to the kind activities they carry out. A given community's internet needs would therefore determine its use. For instance, a business community has unique internet needs from a health community, an agricultural community or a religious community. However, just like communities needed the traditional media, communities need the internet for communication among themselves. As a new medium of communication, the internet offers the modern communities a myriad of opportunities and benefits, as mentioned below, for dissemination and access of information.

Business communities have used the internet to provide information on products and services to their customers, while customers use the internet to search and research on products and services they want to buy. On the needs of the internet to business communities, Tan and Teo (1998) state that the internet removes many barriers to communication with customers by eliminating obstacles created by geography, time zones, and location. All communities, including religious ones like the one being studied here, would therefore require the internet to eliminate the many barriers to communication that come with other older media and therefore enjoy the potential benefits of internet use as listed below.

2.4.3 Potential Benefits of Internet Use to a Community

Existing literature has documented a number of benefits that communities would enjoy as a result of their internet use. These are the subject of discussion in this subsection.

2.4.3.1 Limitless Capacity

The Internet provides its users with an infinite capacity for use. There is no space limit as found in print media or limited frequency or airwaves (electromagnetic spectrum) or air space as is the case with broadcast media (Campbell, 2007). Many communities have been unable to access these media forms because of their limited capacity which is mostly shared by the powerful and influential individuals and communities. On the contrary, any one is able to access the internet on an equal basis, provided one has a computer and a means for connection.

Baran (2004) says that the Internet will always be accessible and open. There is no spectrum scarcity to limit access. According to a survey, *Rural Internet Users in North America* (Mayhew and Richardson, 1996), internet users indicated that the internet provided them with a very convenient method for quickly accessing a large volume of information without being impeded by geographic barriers.

2.4.3.2 Easy Operation

The operation of the internet is not typically professional or bureaucratically organised in the same degree as mass media (Poster, 1999). This makes its use easier and affordable compared to other media like print and radio and television broadcast which require huge amounts of investments to operate and large organisational

structures of owners, editors, writers and reporters to deal with. With the internet, one person can perform all the mentioned jobs. Tan and Teo (1998) confirm this as they write that using the Internet is relatively easy.

According to Campbell, et al (2007), the internet does not have gatekeepers to control what content goes into it. Individuals and institutions are able to create their own websites on the internet. However, in order to ensure the internet is operated professionally and provides authentic information, professional communicators should educate and guide communities in their use of the internet.

2.4.3.3 Dual Purpose

It serves as a means for both interpersonal and mass communication (McQuail, 2000). This dual purpose characteristic of the internet gives it advantage over other older means of communication which have very specific uses, either as one to one (interpersonal) or one to many (mass) means of communication. This means that by using the internet, a community can solve communication problems at both levels and therefore achieve great efficiency in communication. In this regard, Campbell (2007) says that the internet offers a diverse array of communication models. Instead of the few-to-many model of traditional media, the internet offers more opportunities for both one-to-one and many-to-many communication encounters.

2.4.3.4 Less Restricted Ownership and Control

Compared to other media like the print, radio and television, internet ownership and control is less restricted. In reference to the laissez-faire operation of the internet, McQuail (2000) observed that the system had an inbuilt resistance to attempts to

control or manage it. It appeared not to be owned or managed by anyone in particular and to belong to no territory of jurisdiction. In practice, its content and the uses made of it are not easy to control or sanction, even where jurisdiction can be established.

Therefore, electronic means of communication offered escape from illegitimate imposition of censorship and regulation on broadcast Radio and TV (Pool, 1983). Pool argues that the only logical case for state control was spectrum shortage and the need to allocate access opportunity in semi-monopoly conditions.

2.4.3.5 Increased Media Participation by Communities

The technology of the Internet has led to the emergence of an interactive society (Communication Technology Determinism Theory). The Internet is not only an interactive media in its own right but it has enhanced the ability of interactivity of the old and modern media (Campbell, et al, 2007). It enables easier communication between the producers of media products and the consumers, or the audience. People are able to send feedback to print and broadcast media through the internet thus opening opportunity for more audience participation in the media unlike before where media products would flow one way with very rare opportunities for feedback. With the internet, receivers are able to respond almost immediately to senders' messages.

The internet itself allows a two way communication between senders and receivers. Individuals in communities are therefore able to share information with each other and communicate effectively. The internet has therefore advantages over other media when it comes to participation. It has in fact increased peoples participation in other media like the radio, TV and newspapers. These media are using the internet to

enhance their audience's participation. According to McQuail (2000), the internet has enhanced people's access and use of other earlier media in addition to it being a medium in its own right.

2.4.3.6 Reinforcement of Community

The internet, if adapted to a specific community's needs is able to enhance its members' interaction. Unlike the traditional media which due to their largeness of scale and importation of outside values and culture are viewed to undermine local communities, the internet can be easily localised to sustain local communities. Members of a given community can communicate with each other with everyone having an opportunity to use the medium to give feedback or originate their own information that they want to share with others in the same community, such as it happens with social sites. McQuail (2000) says that the media, including the internet, in adapted localised forms could serve to reinforce community under the best conditions.

Elsewhere, an article on, "Social Networking Benefits Real-Life Communities" indicates that research on who people communicate with online shows a lot of local activity (Haythornthwaite, 2002). This confirms that online communication reinforces local relationships and local identities and therefore local communities. Emerging and evolving uses of information and communication technologies only serve to reinforce and regenerate geographically-based community identities.

2.4.3.7 Reduced Communication Costs and Affordability

The internet is relatively affordable in terms of the amount of money needed for its investment compared with other media. For example, the cost of owning and operating a television or a newspaper is prohibitive for most people, but the cost of buying a computer, a modem and internet access is relatively modest (Campbell, 2007). In addition to low investments costs, the internet is an affordable medium for disseminating both small and large quantities of information compared to other traditional media like the radio, print, and television. Perton (1995) argues that the Internet represents an alternative form of advertising and is certainly cheaper than advertising on television and radio and at the cinema. Therefore, communities should savour the opportunity and use the internet to reduce cost of disseminating and accessing information even at the local level.

2.4.3.8 Convenience and Efficiency

When used, the internet is very convenient and efficient. One can use it in their time and location of choice and the time that the message takes to reach the recipient is almost instant. It just requires a click and the information is delivered, unlike other media like print which would take a long time to print, package and travel to deliver some information. Users also can call on the information they require quite easily on demand at their own convenience, even past information. Because of its large capacity, the internet can store very large quantities of information in a convenient and easily accessible way, from anywhere, something not possible with many other media.

The e-government allows citizens to interact with computers to achieve objectives at any time and any location, and eliminates the necessity for physical travel to government agents sitting behind desks and windows. On the administrative side, the internet helps to access or retrieve files, and linked information can now be stored in databases in contrast with hardcopies stored in various locations. Individuals with disabilities or conditions no longer have to be mobile to be active in government and can be in the comfort of their own homes. Similar benefits as those experienced by citizens in the e-government above could as well be enjoyed by members of an 'e-community' through their use of the internet.

2.4.3.9 Accessibility

The internet is readily accessible for those who want to use it since it is unmediated by the powerful interests that control other media like print and broadcasting. For instance many governments in the world have been known to control the content of print media and the channels of broadcasting. Gringras (1997) says, "You do not need to be rich and powerful to have a presence on the www (World Wide Web)." The internet allows individuals to create and distribute their own messages more easily than other media, It enables people to become producers rather than just consumers of media content. It is therefore easy for a given community to localise internet content to their unique needs.

Although the rising rate of commercialisation of the internet is impacting negatively on its accessibility by local communities, it can still be said to be more accessible for use by local communities compared to other media like the radio, TV and newspapers. According to Campbell (2007), not all efforts to commercialise the

internet have been effective, and to a large extent the internet ethos of free information is alive and well. He says that the free trade of information on the internet continues.

Still on easy accessibility, Poster (1999) argues that the internet transgresses the limits of the print and broadcasting models by: (i) Enabling many-many-conversations (ii) Enabling the simultaneous reception, alteration and redistribution of cultural objects (iii) Dislocating communicative action from the posts of the nation, from the territorialized spatial relations of modernity (iv) Providing instantaneous global contact (v) Inserting the modern/ late modern subject into a machine apparatus that is networked.

The above characteristics of the internet make it a globally accessible medium of communication. However, this study will investigate whether this is the situation among all communities worldwide.

2.4.4 How Internet Use by Communities could be Enhanced

In order to enhance internet use by communities, various ways have been suggested as detailed in this sub-section.

2.4.4.1 Enhancing Technology Literacy

Many communities are still ignorant on internet and its use and potential benefits. Educating such communities on the internet and its use and benefits is therefore important to enhance technology literacy. It is easier for communities to adopt a technology when they fully understand it and its value.

A report by The Digital Inclusion Coalition (2006), focusing on closing the digital divide in Minneapolis, states that many of the digitally disenfranchised do not have the skills or confidence to fully benefit from a computer or Internet access, even if it is available. Enhancing technology literacy would therefore help communities to make effective use of the internet, when and where it is available to address their communication needs.

2.4.4.2 Making it more Accessible

Internet penetration currently stands at 36.6% (Sunday Nation, Oct. 20, 2013, “AU Cyber Security Proposal Criticised”). There are many ways through which internet access could be improved. The Kenya National Information and Communications Technology Policy (2006) outlines some of the ways such as setting up a universal access fund to help those willing to provide internet services to the marginalised areas. Other ways of increasing internet access among communities include, among others, improving information and communication infrastructure, providing internet access facilities at grassroots level, subsidising internet services by the government to counter commercial interests, and development of universal access policies by governments.

A report by FAO (1996) titled, *The Internet and Rural Agricultural Development: An Integrated Approach*, cites monopolistic telecommunication service environments common in developing countries as liable for stifling technological innovation, infrastructure investment and price improvements that often come with competition. Consequently, FAO recommends the address of such monopolistic tendencies through

universal access policies by governments to give ownership to smaller companies and organisations.

2.4.4.3 Providing Relevant Local Content

Availability of relevant local content would motivate members of a given local community to use the internet because it would address their needs. According to The Digital Inclusion Coalition report (2006) titled *Recommendations for the Wireless Minneapolis Community Benefits Agreement*, many communities are not convinced that the Internet can provide online content that is relevant to their needs and daily lives. The report thus recommends training that would help such communities to develop their own relevant, local, online content to strengthen them. Yet another report, “Promoting the Internet in South Asia” in *Economic and Political Weekly* (Mehta and Akhtar, 1999), observes that uploading content which has a wider relevance to the local community was one of the recommendations given for promoting internet use among the local communities.

2.4.4.4 Making it Affordable

As indicated in some earlier sections, affordability is an important factor with regard to internet use. Making the internet affordable to all communities across the globe will therefore definitely enhance its use. One way of making internet affordable is by curbing the emerging tendency of commercialisation and privatisation of the once democratic network of relatively equal individuals and institutions (Campbell 2007).

2.4.4.5 Unregulating it

The internet has been touted as free from any form of control and regulation (Gringras, 1997). However, as the medium expands, different kinds of control and regulatory measures, similar to those imposed on traditional media, are being devised by governments. Such measures would impede some communities use of the internet, for instance where such communities are not able to comply with some regulations, which sometimes imply costs. In order to enhance internet use therefore, the medium should remain as open and free as possible, as it was initially intended. The government should encourage community ownership by formulating policies and regulations that allow high level of community involvement and ownership of the internet and therefore curb the monopoly ownership and commercialisation of the medium.

2.5 Theories of Communication relevant to Internet Use

Two theories have been chosen for the purpose of this study. These are the Communication Technology Determinism and Information Age/Society theories of communication media. Both are post modern theories of mass communication which have emerged with the emergence of the new media technologies. The two theories have propositions that relate to the variables in the proposed study, 'internet use' and 'address of communication needs in communities', and have influenced the objectives of this study. The two theories posit that societies change with the prevailing communication technologies, and thus their choice.

The communication technology determinism theory posits that there is a long and still active tradition for links between the dominant communication technology of an age and key features of a society. H.M. Innis, the first significant theorist in this tradition,

attributed the characteristic features of successive civilizations to the prevailing and dominant modes of communication, each of which has its own 'bias' in terms of societal form (McQuail, 2000).

This means, according to the theory, that the type of society or the culture of a given community is determined by the prevailing communication technology. For instance, the invention of the printing technology in the 15th century led to the industrialised society, the invention of the telecommunication in the mid 19th century led to the modern age of mass media, while the invention of the new media technologies in the last half of the 20th century and 21st centuries has led to the interactive society. This has been as a result of more efficient and effective media for communication and easy access to such media. Internet is one type of these new communication technologies which has led to more interactivity and intercommunication among communities. Goulder (1976), a Sociologist and another proponent of this theory, interpreted key changes in modern political history in terms of communication technology. He connects the rise of ideology to printing and the newspaper, on the grounds that these stimulated a supply of interpretation and ideas (ideology).

In the above propositions, the theorists argue that communication technologies influence communities in certain ways. However, the theory tends to treat all communities in the world in the same way while the use of technology in communities can be as unique and diverse as communities are. There are many other factors and variables that determine the level of influence on communities by new technologies.

Schement and Curtis (1995) aptly point out the weakness of this theory as they say that in this theory, like in many theories, there is a potential tendency to concentrate on the potential for (or bias towards) social change of a particular communication technology and to subordinate other variables. For instance this theory, although applicable across many parts of the world, does not take into account those societies that are always left behind or passed by new technologies for various reasons. The theory has over generalised society and ignored specific groups of society and how they have responded to emerging technologies. This research will investigate the extent to which the internet has transformed the community of the Catholic Diocese of Eldoret, specifically by addressing its communication needs.

Other observers and critics of this theory argue that effects occur only when inventions are taken up, developed and applied, usually to existing uses at first, then with great extension and change of use according to the capacity of the technology and the needs of the society. These observers are wary of single-factor explanations of social change and do not really believe in direct mechanistic effects from new technology (McQuail, 2000).

The other theory that influenced this study is the Information Society or Information Age theory. The theory is closely related to the communication technology determinism in that it relates types of society to succeeding stages of economic and social development. The terms 'network society' (McQuail, 2000) and 'knowledge society' (Williams 2003) are also used to refer to the theory. One of the most influential accounts of the information society came from Daniel Bell as early as

1973. His theory traces the transition from a pre-industrial, through an industrial to a post-industrial society, his label for information society (Williams, 2003).

The main characteristics of the post-industrial society were found mainly in the rise in the service sector of the economy relative to manufacture or agriculture and thus the predominance of information based work. The production and distribution of information of all kinds, especially computer based technology has itself become a major sector of the economy. Information societies have become dependent upon complex electronic information networks and allocate a major source of their resources to information and communication activities (McQuail, 2000).

According to this theory, it is expected that all institutions in this age of information society, be they private, public, religious, learning institutions and others should pay special attention to information and communication needs and thus provide the required infrastructure and other resources necessary for processing and disseminating useful information. This should be provided alongside other essentials like health, education, agriculture, business and even pastoral needs. In the information age, no one can afford to ignore the large flow of information. Those who do, do so at their own disadvantage.

In view of the above, this theory has implications to this study and therefore its importance to the study. But just like the communication technology determinism, this theory fails to acknowledge the diverse and unique communities and societies of the world and how they are influenced by technological developments. Societies do not exist uniformly. Other factors like where a particular technology originates, its

type and capability to spread and the time it takes for such technologies to exist before they can influence the society have been ignored.

This study will attempt to address those weaknesses in the theory by establishing whether all communities, with specific reference to the Catholic Diocese of Eldoret, respond to new technologies the same way, and if not why?

2.6 Research on Internet Use by Communities

Despite the hype about the Internet as a new medium of communication both on a one-to-one and on a mass basis, little research has been done on the extent to which it has gone to address the communication needs of local communities. Although some studies have been done on the use of the internet by virtual communities and by real communities in some parts of the world, few studies have been done to investigate the use of the internet by local communities to address their communication needs, especially in Africa.

Peterson (2009) investigated Internet Use in a Community Health Clinic Population in Oklahoma, Wilson and Boone (1998) investigated Internet Use among Community Leaders in Rural Kansas with the aim to determine the extent and type of internet use among the leaders, FAO (1996) investigated internet use in Rural and Agricultural development in various parts of the world, including African countries like South Africa, Zimbabwe, Zambia, Senegal and Egypt, Sharma and Arya (2005) investigated internet benefits for Livestock Farmers in Andhra Pradesh, Tan and Teo investigated factors influencing the adoption of the Internet by business organisations and MIT New Media Action Lab and the Institute of Knowledge Management of University of

Science and Technology of China conducted a survey on internet usage and communication needs of NGOs in China.

In Uganda, Scott, et al (2008) investigated the communication needs of rural communities and noted some of their key communication priorities. However, this was in relation to the use of telecommunications, particularly the mobile phone. Other related studies include those in the area of Information and Communication Technology (ICT), for example a study in South Africa and Nigeria that sought to investigate ICT provision to disadvantaged urban communities (Akinsola, et al (2005) and another by Gillwald, et al (2010) who carried out a gender assessment of ICT access and usage in Africa. In Kenya, Kituyi-Kwake and Adigun (2008) carried out a study analysing ICT Use and Access amongst Rural Women in Kenya.

2.7 Conceptual Framework

This study conceptualised that in order for local communities to address fully their communication needs, they must first clearly identify those needs. Secondly, the communities must have a clear understanding of the available media and how they can be exploited to address those needs. The extent to which individual communities utilise the media at their disposal largely determines their address of their local communication needs hence solving their communication problems. Therefore, the use of the internet to address local communities' communication needs depends on how individual communities interact with or address the many factors revolving around its adoption and use.

The ability of the internet to solve communication problems depends on many factors such as accessibility, expertise, and the use to which it is put by the user or

community and so on, at all levels (McQuail, 2000). In order to have an impact at the local level, the internet should be adapted to a particular community's communication needs by addressing factors that constrain its use.

With special reference to the Catholic Diocese of Eldoret Community, this conceptualisation can be presented diagrammatically as follows:

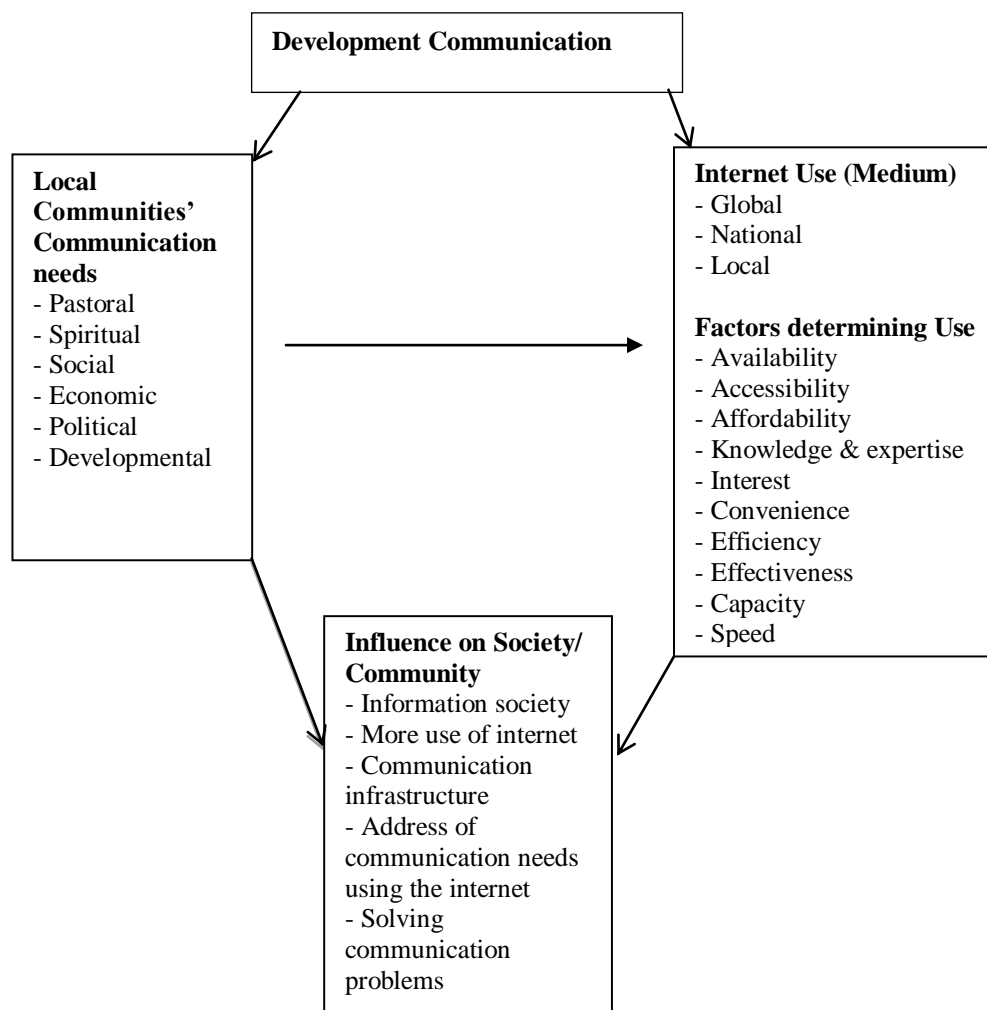


Figure 2.1: Conceptual Framework

2.8 Conclusion

Existing literature on internet use and how communities in the world use it to address their local communication needs seem to treat all communities in the world equally. However, different communities have different communication needs which determine their use of a given medium, more so the internet as one of the newest communication media technologies. The factors controlling internet use by communities apply differently from community to community depending on their unique needs. Therefore, individual communities should attempt to understand their own situation to ensure that their local communities' communication needs are adequately addressed by a given medium. Local communities will only reap the full benefits of the internet when they use it appropriately to address their communication needs. This includes understanding and addressing the challenges that accompany the use of the internet among local communities. Otherwise they will continue experiencing communication problems despite the emergence of this new and beneficial medium of communication. This study intends to shed more light in regard to this.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The ensuing chapter expounds on the research methodology in terms of approach, method, study area, sampling, research instruments and data analysis. The validity and reliability of the study have also been examined as well as the ethical considerations that were observed during the investigation.

3.2 Research Approach

This study was quantitative in approach. This research approach yields discrete numerical or quantifiable data (Mugenda and Mugenda, 2003). The approach was appropriate for the study as the variables involved were measurable in discrete values. These were 'internet use' and 'local communities' communication needs'. The chosen approach enabled the generation of explicit measurements with regard to internet use in addressing the communication needs in the Catholic Diocese of Eldoret. Quantitative research also reinforces objectivity as the researcher tries as much as possible to be detached from the subject of study or respondent (Kombo and Tromp, 2006). The choice of the approach was therefore intended in order to reduce any form of bias while conducting the study by generating hard facts about the situation and increasing reliability. In addition, the approach was necessary as the data was to be analysed using descriptive statistics and the approach is best suited for this analysis.

3.3 Research Method

The research method used in this study was survey. According to Mugenda and Mugenda (2003), survey is the best method for collecting original data and measuring

the characteristics of large populations, a fact that influenced my choice of the method considering the expansiveness of my study population. This method was important in this study as it allowed the collection of quantifiable information from a representative sample of the target population. The survey method is also useful in exploring the existing status of two or more variables at a given point in time. The method was thus used to determine the status of the population being studied with respect to the variables in this study.

In addition, questionnaires were used to collect data from the respondents and survey is the best method for this research instrument (Kombo and Tromp, 2006), hence the choice. The method was also preferred because it is specific and therefore assisted in meeting the objectives of the study and in analysing the data using descriptive statistics.

3.4 Study Area

The area under study was the Catholic Diocese of Eldoret (Appendix I) which is in the northern part of the Great Rift Valley of Kenya. Geographically, the Catholic Diocese of Eldoret covers the new administrative counties of Uasin Gishu, Elgeyo/Marakwet and Nandi with a total area of 9,254 square kilometres. The Diocese has seven deaneries, which are Church administrative units, spread across the mentioned counties with a Catholic population of approximately 490,000 out of a total population of 2,017,142 (2009 Kenya National Census). The seven deaneries of Cathedral, Majengo, Seminary, Kapsowar, Iten, Kapsabet and Nandi Hills are further divided into parishes which are currently 44 and keep rising following creation of new ones occasionally.

The Catholic Diocese of Eldoret was preferred for this study because it constitutes a large community spread over a large geographical area which needs to communicate consistently to maintain their communion. The communication needs of the large Diocesan community are enormous and have not been fully addressed by the media in use currently (see section 1.2.2). Therefore, this study sought to identify the use of the internet by the community, as a new medium, to address some of its local communication needs.

3.5 Population and Sampling

The target population for this study was 490,000 as mentioned earlier. The cluster random sampling technique (Kombo and Tromp, 2006) was used to select the study population. This technique is appropriate for a large and dispersed population like that of the Diocese. The method allows for the division of the study population into clusters and random sampling of everyone in the clusters. In this case, the population was divided into deaneries and parishes; and parishes further divided into urban and rural, to represent the entire Diocese's population and its diversity (Appendix III).

For the purpose of this study, Uasin Gishu County (Appendix II), which corresponds to Eldoret Deanery in Church terms, was selected as it is the largest and contains the characteristics of parishes in other deaneries and would therefore provide sufficient representation.

10 parishes out of 18 (56%) in Eldoret Deanery were randomly selected following the criteria of urban and rural (Table 3.1.). To attain the number selected in each category, the number of parishes in the category (n) was divided by the total number of parishes in the Deanery (18), and multiplied by the total number of the sample parishes (10).

The selected parishes were picked randomly where every second parish was picked from the alphabetical list (Table 3.1).

At least 40 respondents from each of the 10 sampled parishes were purposively sampled to form the study population of 400 respondents. Purposive sampling (Kombo and Tromp, 2006) was used at this stage to target people believed to have an understanding of new communication media technologies. In this case, the respondents included: parish priests, catechists, teachers, health administrators, heads of institutions, youth group leaders, parish leaders, heads of department/committees and members of religious congregations (brother and sisters), depending on their numbers. This group of people also comprise opinion leaders, and form a class of innovators and early adopters of new technologies.

Table 3.1: Sampling Frame

Eldoret Deanery/Uasin Gishu County

Category	Urban	Rural	Total
Parishes	1. Cathedral 2. Huruma 3. Kapsoya 4. Kimumu 5. Langas 6. Majengo 7. Moi University 8. Seminary	1. Burnt Forest 2. Cheptiret 3. Kaptagat 4. Matunda 5. Moiben 6. Timboroa 7. Turbo 8. Yamumbi 9. Ziwa 10. Tembelio	18
No. per category	8	10	18
Sample No.	4	6	10

3.6 Research Instruments

Questionnaires were used to collect data in the proposed study (see appendix IV). This research instrument gathers data over a large sample (Kombo and Tromp, 2006). Questionnaires were therefore useful in gathering data from the diverse sites and population in the Catholic Diocese of Eldoret. The choice of questionnaires was also because they are appropriate when data analysis is to be done using descriptive statistics as was the case in this study.

For easy and effective collection of all the pertinent primary data, the questionnaire was divided into five sections with the first being background information of the respondents including name of parish, membership of a group, gender, age, education and designation in the community. These questions were necessary as they helped to confirm the respondent's belonging to the study community. The rest of the sections contained questions formulated to extensively cover each of the four objectives. The questionnaires had some structured and unstructured questions with both singular and multiple answer questions. Structured questions are easy to answer and enable better analysis while unstructured ensure greater depth of response (Mugenda and Mugenda, 2003), thus the decision to include both.

The questionnaires were self-administered (*ibid*) because the respondents involved were purposively sampled to include only those who were literate and knowledgeable about the subject under investigation. By self-administering the questionnaires, the researcher made sure they went to the right and intended respondents. Subsequently, the respondents were able to fill in the questionnaires without much problem or need for assistance or further explanation or clarification. The questionnaires were thus

delivered by hand to the respondents, accompanied by a list of the target respondents (appendix V) and introduction letters (appendices VI and VII), requesting the participants to fill in and return within a given period. This saved time and travelling costs for me. However, I still had to make a lot of follow-ups to the various parishes to ensure the questionnaires were rightly filled and returned thus achieving a response rate of 98.5% which translates to 394 out of the 400 questionnaires distributed. This made the data collected more reliable and credible. I also had to reprint some more questionnaires in a few cases where they had been misplaced by the respondents in some parishes. Despite this effort, I still had some few missing at the end but are negligible and would not alter in any way the findings of this research.

3.7 Data Analysis

The collected data was first organised in readiness for analysis. Data organisation included identifying (and correcting) errors in the data, coding the data and storing it in appropriate form (Kombo and Tromp, 2006). The SPSS computer programme was used to code the data before analysis. In this case, analysis involved examining the coded data critically and making inferences (ibid).

Descriptive statistics were used to analyse the data. Descriptive statistics are appropriate for exploring an existing situation (Mugenda and Mugenda, 2003) hence my choice. They enable the researcher to meaningfully describe a distribution of scores or measures using a few index or statistics. In particular, the descriptive statistics of mean and frequencies were used in this study to determine internet usage among the people in the Diocese. Percentages were also used to compare internet usage among the different clusters of parishes and groups of respondents.

Drawing from (Kombo and Tromp, 2006), the analysed data was finally presented using statistical and graphical techniques. Statistical techniques included mean and frequency tables, while graphical techniques include bar graphs and pie charts.

3.8 Validity and Reliability of the Study

Validity is the degree to which an instrument measures what it purports to measure (Mugenda, 2008). This answers the question, “Am I measuring what I intend to measure?” In other words, validity is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study. To ensure validity of this study, the researcher made sure that the questionnaire was well designed to cover all the objectives of the study. The questionnaire was pre-tested and reviewed before the actual data collection. This was done with the help of the supervisors who approved the questionnaires. Validity was also considered during sampling as the researcher made sure the sample represented all characteristics of the target population. The respondents of the study consisted only those people with good understanding of the subject under investigation and this was well explained when administering the questionnaires. Follow ups were made on respondents to ensure a significant number of the questionnaires were returned attaining a response rate of 98.5%.

Reliability on the other hand is a measure of the degree to which a research instrument would yield the same results or data after repeated trials (ibid). In order to achieve a high degree of reliability in the study, the researcher took time to sensitise the respondents on the objectives of the research and need to give accurate answers. The researcher was also available to clarify any issues to respondents. The sample was as inclusive as possible of the different groups in the target population. In

addition, a high level of accuracy was observed during coding and any form of bias was avoided during the entire process of data analysis.

3.9 Ethical Considerations in the Study

Ethical considerations in research encompass application of ethical standards during the research process. The standards include right to life, right to protection from pain and injury and right to privacy (Mugenda, 2008). Ethics in research ensures that the dignity of the human being is upheld and that no negative effect results from the research. This study made ethical considerations in the entire process. The choice of the problem was justified in that the researcher sought to benefit the community under investigation and other similar ones by solving their communication problems. It was therefore not for the researcher's interest alone. Also to observe ethics, the researcher obtained authorisation to carry out the research from the relevant authorities and consent from participants before engaging them to ensure their rights were respected. The researcher took time to explain to participants and the relevant authorities the purpose of the research openly and honestly and data collection was done through the right structures, in this case parishes and parish priests from whom permission was sought and verbal consent given. The respondents were voluntary and were assured of confidentiality which was observed throughout the process. The questionnaire did not require them to identify themselves for purposes of confidentiality.

In terms of data analysis, the researcher was conscious to avoid any form of bias or distortion of the findings. Finally, the researcher promised to share the findings with the study community and other stakeholders for their benefit.

3.10 Conclusion

This chapter has expounded on the methodology in terms of approach, method, sampling, data collection instruments and analysis that was deemed appropriate for a study area of the size of the Catholic Diocese of Eldoret. The methodology was chosen to attain validity and reliability of the findings. Although the research targeted the entire Catholic Diocese of Eldoret, data collection was confined to Uasin Gishu County which shares characteristics with the other counties comprising the Diocese, Elgeyo/Marakwet and Nandi. This methodology allows for generalisability hence its choice for the expansive area and large target population. The methodology tackled well the variables under study giving a clear and accurate picture of the situation in the Catholic Diocese of Eldoret with regard to internet use and address of local communication needs, which was the aim of this study. The objectives of the study were therefore achieved through this methodology as intended. This is clearly exemplified in the next chapter.

CHAPTER FOUR

DATA PRESENTATION AND INTERPRETATION

4.1 Introduction

This Chapter presents in detail the primary data collected from the field using the questionnaires. The first part of the presentation provides the background information on the research respondents while the rest is done in order of the objectives as follows: Local communities' communication needs, use of the internet within the community, extent to which the internet addresses communities' communication needs and the benefits and constraints of internet use among local communities. The data has been analysed using the descriptive statistics of mean, frequencies and percentages and presented in statistical and graphical means using tables, charts and graphs.

4.2 Background Information on the Participants

This section provides data on participants in the study in terms of membership, gender, age, education and designation, in that order. Information on membership and designation was needed for authenticity with regard to the members of the study community. On the other hand, age, education and gender are important factors that determine internet use and were therefore necessary for this study.

4.2.1 Membership of Respondents

Respondents were required to state their membership in the church. Majority of the respondents 281 were in different groups in the church, like the choir, Bible study groups, associations and small Christian communities. 52 of the respondents were drawn from religious congregations of Brothers and Sisters (Nuns), 49 from the

church learning institutions and 12 were from various departments in the church like Education, Health, Gender, HIV/Aids and Communication.

The categorisation in terms of membership was important in ensuring that different members of the community had an opportunity to respond. The fact that the respondents belonged to one of the above categories in addition to their parishes confirmed their belonging to the community under study and in turn understanding of the issues under investigation. This ensured that only members belonging the Catholic Diocese of Eldoret, and sharing some things in common, religion being the main identifying aspect in this community, participated in the study. This categorisation in terms of membership provides important credence to the information provided by the respondents.

4.2.2 Gender of Respondents

In relation to gender 54% of the respondents were male and 46% were female. This indicates a gender disparity of 8% among the respondents with more male having responded to the questions compared to female. Although the study had no deliberate target in terms of gender, it turned out that more male than female acted as respondents to the study. This scenario could mean that the largest percentage of the community's leaders are male as the study specifically targeted leaders. The more male than female respondents could also be due to the target of certain groups like priests and catechists which are solely male. Also, considering that the purposive sampling of the population only targeted people with understanding of the internet, this could mean that more male than female have an understanding of the internet and use it. This confirms existing theory with regard to gender and internet use. Gender is

cited as one of the cultural factors determining internet use in various communities in the world as explained in Chapter Two.

4.2.3 Age of Respondents

The study further sought to determine the age of the respondents that were sampled for the study. Majority of the respondents (98) were between the ages of 33 – 40 years, 95 were above 40 years, 80 were between 28 – 32 years 75 reported to be between 23 – 27 years and 46 respondents were between 18 – 22 years.

The findings show a majority of respondents falling between the age of 23 and over 40. The increase in the number of respondents with age increase could probably be due to the fact that the sample of respondents was purposively constituted to include people with specific active roles in the church, especially leadership, a group that comprises opinion leaders. This group was expected to have a good understanding of the subject in question and was therefore bound to provide useful and reliable information for this research.

In terms of their understanding of the internet, there is no much differentiation among the different age groups despite the researcher having targeted a population with a basic understanding of the internet. This means the community's understanding and use of the internet cuts across different age ranges. Although previous studies (see Chapter Two) have indicated that younger people are more inclined to use the internet, the above figures indicate the contrary. This analysis seems to suggest that age may no longer be an important consideration when assessing internet use among communities in future. This is probably because children are now being introduced to computers and new media technologies early in life as they become increasingly

available. On the other hand, older people, even those who did not learn computer in their regular schooling are embracing the new technologies and taking own initiative to learn. As a result, all generations will in the near future be at par in terms of their understanding and response to the post modern communication medium of the internet.

4.2.4 Education Level of the Respondents

In relation to respondent's education, the study found out that majority of the respondents (170) had tertiary institution training, 117 were university graduates, 86 were secondary school leavers and 19 were primary school leavers.

Many of this study's respondents had tertiary and university levels of education probably because the study purposively targeted people with a general understanding of the internet. This group is significant in that it comprised people who would very well grasp the issues under investigation. As a result the data provided by the respondents was credible and reliable. Education level is cited among factors that control internet use as internet use requires some level of understanding and literacy. Studies indicate that communities with high levels of literacy will more likely use the internet compared with those with low levels of literacy (see Chapter Two). This study does not therefore deviate from previous studies with regard to internet use and literacy levels.

4.2.5 Respondents' Designations

The study sought to determine the responsibilities of the respondents in the community. Majority (153) were in leadership positions in the church, 97 were

teachers, 74 were youth leaders in the church, 28 priests, 28 catechists and 8 were religious. Figure 4.1 below shows a summary of the results.

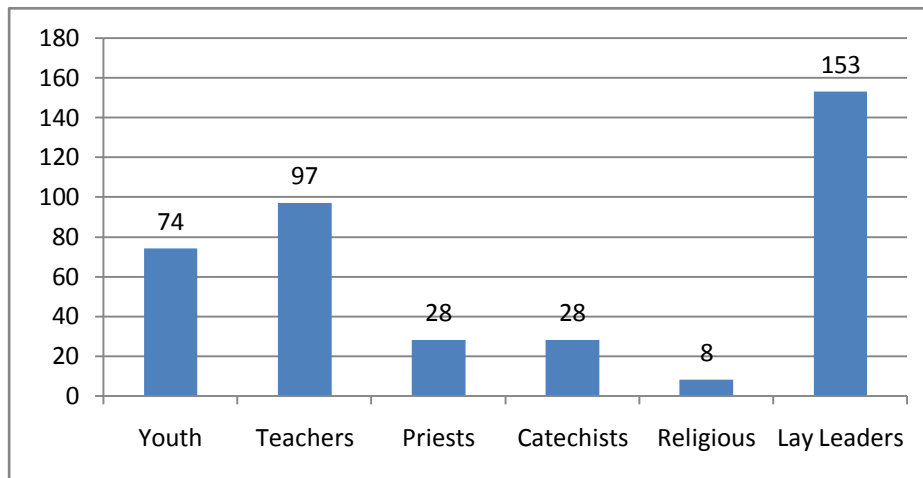


Figure 4.1: Respondents Designations

The above categorization was important to reflect the community of the Catholic Diocese of Eldoret and representation of all groups. The lay faithful represented by leaders, the teachers and the youth constitute the majority. The priests, religious and the catechists comprise a few members of the community charged with specific spiritual roles and thus their small number in the sample.

The groups designated above comprise people with various roles in the church, including leadership and therefore their much need to communicate in addition to them being originators of information. Consequently the group had better knowledge of different aspects of the study community and was more informed about the communication media used in the community including the internet and would provide useful insights into the study. This group is also in a position to influence opinion and trends among the community members and their responses would most likely reflect the scenario in the entire community. Further, the groups include policy makers and guide in implementation of policies in the organization and the entire

community. They therefore have an understanding of the community's needs including communication needs.

4.3 Community's Communication Needs

This section provides data in relation to the first objective of this study which was to identify the local community's communication needs. The local communication needs were viewed in terms of the need by the community members to receive or send certain specific information related to their community among themselves. The objective was thus achieved by asking the participants two questions: the Kind of Diocesan information needed most and the Kind of Diocesan information sent most. The following is a presentation of the data collected in respect to this.

4.3.1 The Kind of Diocesan Information Needed Most

The study sought to determine which kind of information respondents needed most in the Diocese. It was found out that information on faith was the most needed cited by 279 respondents, followed by reports on new and ongoing programmes needed by 158 respondents, apostolic and pastoral statements and letters was needed by 153 respondents, upcoming activities, events and functions was the fourth most needed type of information cited by 114 respondents, information on new appointments and other changes in the diocese, lay movements and associations and information on entertainment followed and fifth, sixth and seventh positions respectively. Table 4.1 below shows a summary of the results. The total frequencies on this response exceed the 394 respondents who participated in the study because it was a multiple response item.

Table 4.1 Kind of Diocesan Information Needed Most

	Frequency	Percent
Information on faith	279	31.1
Reports on new and on-going programmes/projects	158	17.6
Upcoming activities/events/functions	114	12.7
Apostolic and Pastoral Statements/letters	153	17.0
New appointments/other changes in the Diocese	85	9.5
Entertainment e.g sports, and festivals	42	4.7
Information on Lay Movements & Associations	67	7.5
Total	898	100.0

The community studied proved to have unique communication needs in terms of information needed. Being a religious community, top priority reflected great interest in information on faith. The low degree of need for information on entertainment among this particular community is probably due to the respondents' understanding of the community under investigation in this study. Although the same respondents might be in need of information on entertainment, this need was not ranked high in this study. This might not necessarily mean that the religious community does not have entertainment communication needs but probably that such could be addressed through other communities that the respondents might belong to. An individual can belong to more than one community (Staroevska-Slabera, 2002), for instance the members of the studied community could also be members of their civic counties, farming communities for farmers, educational community for teachers and students and so on depending on an individual's interests and responsibilities.

Some respondents went further to state other needs that had not been enumerated by the researcher. For instance some respondents wanted information on job openings/opportunities while others wanted information on ongoing programmes for catechists, specifically, within the Diocese. A few others wanted breaking news with regard to church matters.

4.3.2 The Kind of Diocesan Information Sent Most

In relation to the kind of information the respondents would want to send most within the diocese 63.8% reported to want to send official communication compared to 33.2% who reported to want to send social information to friends. Some respondents (3.0%) did not respond to this item.

Official communication within the Diocese was again identified as the main communication need among the Diocesan community. The little need for social communication with friends among this particular community probably emphasizes their great need to address their instrumental communication needs as opposed to emotional ones, considering the uniqueness of the community under study. This analysis helps to define further the uniqueness of the community being investigated and sets it apart from other communities some of which would be purely effective or emotional, for example a youth community might most probably prioritise social communication.

4.4 Use of the Internet within the Community

The second objective was to examine the use of the internet within the community. This was explored in terms of access, kind of connection used, frequency of use and reasons for the manner of use; the use at various levels: local, national and global and

finally what the internet is used for or would be used for within the Diocese. This section presents the data collected in this regard.

4.4.1 Point of Accessing Internet

The study linked the point of internet access to its use by the community, thus sought to determine where the Catholic faithful access internet. It was established that a majority, 185 (47.0%) access internet at cyber cafes, 65 (16.5%) access internet at their homes, 54 (13.7%) in schools and colleges, 41 (10.4%) at their work place, 24 (6.1%) access internet in the parish and 14 (3.6%) access internet anywhere through their mobile phones. Some respondents 11 (2.8%) did not respond to this item. Figure 4.2 below gives a summary of the finding.

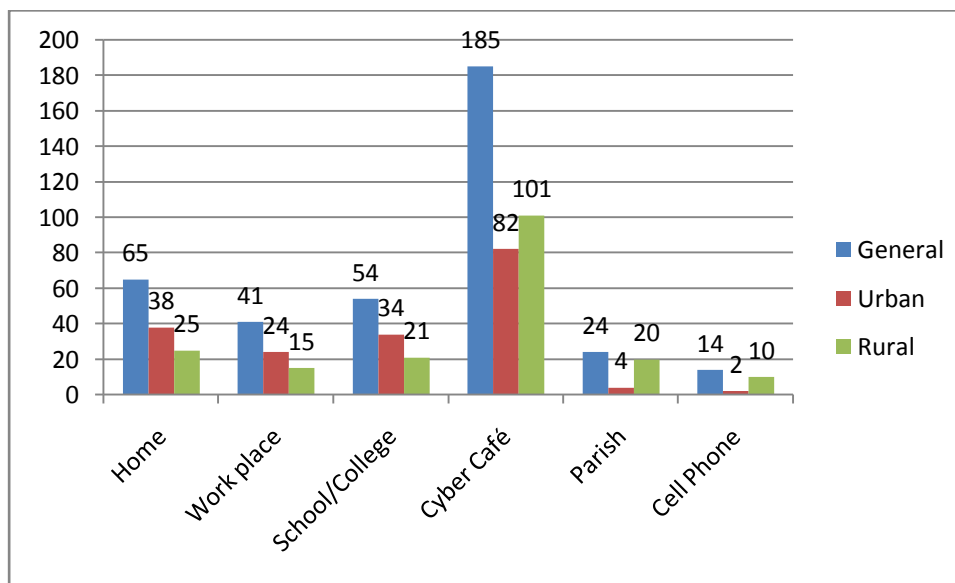


Figure 4.2: Point of Accessing Internet

Accessibility is an important factor in investigating internet use as it greatly influences the use. The above table indicates a significant presence of cybercafés where a majority of respondents access the internet. Internet access at home, which is the second most frequent point of access, is probably through individual community

members' mobile phones or personal computers. The low access at parishes may be interpreted as reflecting unavailability of internet installation in the parishes which are the main administration centres of the community studied. This discovery relates to the low ranking of the internet among the means of communication being used within the Diocese.

Still on access, the study went further to analyse access in terms of rural and urban parishes, as the parishes had in the beginning been clustered into rural and urban. It was found out that majority of the respondent's in urban areas 82 (43.6%) access internet from cyber cafes, 38 (20.2%) access internet from their homes, 34 (18.1%) access internet from schools and or colleges, 24 (12.8%) accessed internet from their work place and a minimal number accessed internet from their parish and cell phones. In relation to this, the study found out that a majority of the rural respondent's 101 (50.8%) access internet from cyber cafes, 25 (12.6%) access internet from their homes, 21 (10.6%) access internet from schools and or colleges, 20 (10.1%) accessed internet from their parish and a minimal number accessed internet from their cell phones as figure 4.4 indicates.

The above comparison of point of access between the urban and rural parishes indicate that respondents in urban areas have more access in their homes, workplaces and learning institutions, that is schools and colleges; than their rural counterparts whose internet access in these places is less. Consequently, their (urban) use of cybercafés is significantly less than the rural parishes. On the other hand respondents in the rural parishes depend more on cybercafés and their personal cell phones. The higher access from their homes by urban respondents may probably due to the fact

that telecommunications and other infrastructure like electricity is more developed in the urban areas hence easy access. Many of the urban respondents may subsequently be having computers in their homes connected to the internet as there is a wide range of choices with regard to internet connection in the urban areas as opposed to only personal cell phones and computer modems which could be the only means the rural parishes might be relying on. This might also be a reason why more of the rural respondents access internet through their cell phones than their urban counterparts as reflected in the figure.

4.4.2 Kind of Internet Connection Used

In terms of kind of connection used, wireless and broadband were the most commonly used, cited by 42.9% and 29.4% of the respondents respectively. 14.0% reported to be using satellite, 7.9% used dial up and 0.5% used other connections other than the above mentioned. The use of broadband and wireless types of connection by a majority of respondents indicates the availability and accessibility by the community to the newest kinds of internet connection. These two types of internet are fast compared to the earlier connections like dial-up which was very slow and the satellite kind of connection also called Internet over Satellite (IoS) which is also relatively slower than the wireless and broadband (<http://typesofinternetconnections.com/>).

The latter are kinds of connection that internet users can access almost everywhere as long as there is coverage as they do not necessarily require fixed cables and connection devices as smaller and portable devices are available to enable connection through the electromagnetic spectrum. The high incidence of use of the latest technology in terms of internet connection would also translate to existence of the technological expertise required for their adoption.

4.4.3 Frequency of Internet Use

The respondents were asked how frequently they used the internet, and 116 (29.4%) reported to use it on a daily basis, 130 (33.0%) said they used it on a weekly basis, 24 (6.1%) on a bi-monthly basis and 113 (28.7%) reported to be using the internet on a monthly basis. 11 (2.8%) respondents did not respond to this item. A summary of the findings are as indicated in figure 4.3 below.

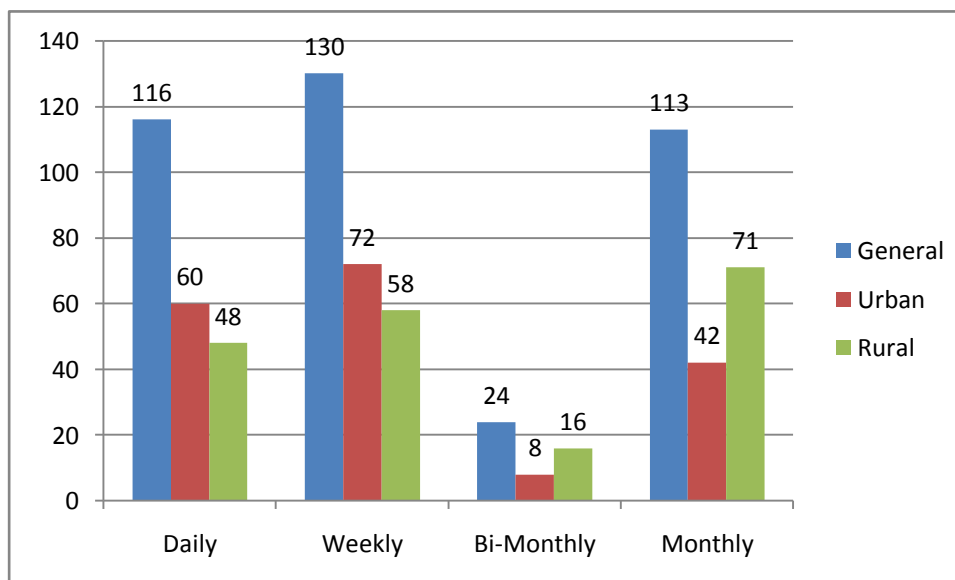


Figure 4.3: Frequency of Internet Use

Majority of the internet users in the Diocese use it on a weekly basis while a significant number use it on a daily basis. Still, a considerable number of users use it on a monthly basis. Very few of the respondents use the internet on a fortnight or bi-monthly interval while fewer reported occasional use like every mid-term, probably for those in learning institutions without internet access. The missing value on the table might be an indicator of the number of respondents who do not use the internet at all, which is negligible. This means that more than half of the respondents are able

to communicate comfortably using the internet on at least a weekly basis. That way the internet would be addressing their communication needs.

The study still sought to determine the frequency of internet use in relation to location. It was found out that majority of the respondent's in urban areas, 72 (38.3%) use internet on a weekly basis, 60 (31.9%) use it daily, 42 (22.4%) use it on a monthly basis and 8 (4.3%) use it on a bi-monthly basis. When the same question was posed to rural respondents, it was found out that majority of them, 71 (35.9%) use internet on a monthly basis, 58 (29.3%) use it weekly, 48 (24.2%) use it on a daily basis and 16 (8.1%) use it on a bi-monthly basis. Figure 4.3 demonstrates this comparison.

The urban and rural respondents again indicated different patterns of use in terms of frequency of internet use. There was considerable decline in daily and weekly use of the internet among the rural parishes in comparison with their urban counterparts who used it more on this basis. However, this trend reversed when it came to bi-monthly and monthly bases where the latter recorded highest mode of use among rural parishes as the former (bi-monthly) recorded an exactly double increase of 8.1% compared to urban 4.2%. This observation further goes to show that the constraint of access is more prone in the rural parishes than the urban parishes.

The respondents were further probed for reasons for their use of the internet in the above manner and a majority (51.5%) stated that their frequency of use was largely determined by needs, 32.7% reported that accessibility influenced their frequency of use and 12.9% said that affordability determined how frequently they used the

internet. Few respondents (2.8%) did not respond to the item. Below is a summary of the findings.

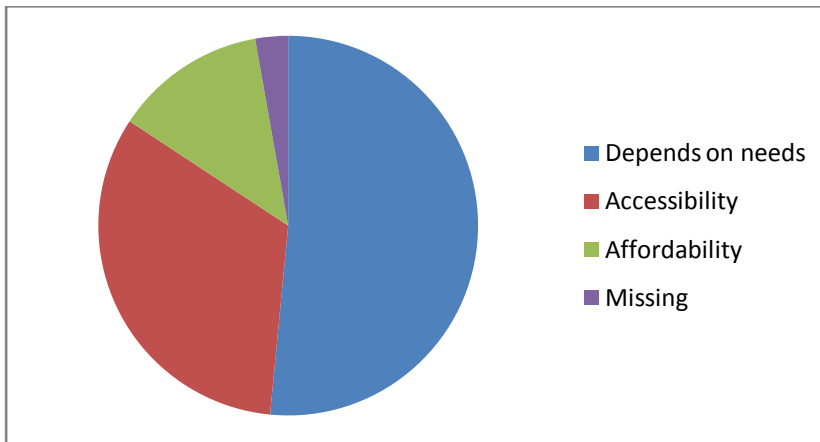


Figure 4.4: Reasons for Frequency of Use

Needs (communication needs in this case) surpassed other factors in determining the frequency of internet use as reflected on Figure 4.4 where more than half of the respondents were driven by needs in their use of the internet. This means therefore that if the internet is able to address a given community's communication needs, then its frequency of use would increase while other factors controlling its use like accessibility and affordability would reduce.

The study also sought to determine how often internet was used to communicate at different levels. On a scale of 1 for most often, 2 for often and 3 for least often the results were as follows: Respondents stated that they often used the internet to communicate at all levels with the diocesan level having a mean of 2.21, and the national and global levels having the means of 2.16 and 2.27 respectively. This data indicates the existence of an almost uniform pattern of frequency of communication using the internet at various levels.

4.4.4 What Internet is Used for/would be Used for within the Diocese

In relation to what the internet is or would be used for within the Diocese, the study found out that internet is or would be mostly used to access information, cited by 271 respondents, followed by using it to read online Diocesan publications cited by 106 respondents. Using internet for official communication came in third cited by 92 respondents, communicating with friends and entertainment purposes was ranked fourth and fifth by 62 and 61 respondents respectively. A summary of the findings are as shown in the table below. Total frequency exceeds the number of responses because it was a multiple response item.

Table 4.2: What Internet is Used for or would be Used for within the Diocese

	Frequency	Percent
To access information	271	45.8
For Entertainment (music, TV, Radio, video, etc)	61	10.3
To communicate with friends within the Diocese	62	10.5
For official communication with the Diocesan community	92	15.5
To read online Diocesan publications	106	17.9
Total	592	100.0

The above table is a reflection of the communication needs of the community studied that would be addressed by the internet if it were to be adapted to suit its needs. Some of the needs could already be in the process of being addressed while others might not have been addressed but have the potential of being addressed by the use of the internet appropriately.

The above table further indicates that the respondents use or would use the internet to address both their instrumental and emotional (ibid) communication needs where top priorities reflect use of the internet to address instrumental needs of accessing information, reading online Diocesan publications and official communication with the Diocesan community. Emotional communication needs of communicating with friends within the Diocese and entertainment were accorded little importance by this community considering their rating on the table.

4.5 The Extent to which the Internet Addresses the Communication Needs

The third objective of this study was to determine the extent to which the internet addresses the community's communication needs. In order to achieve this, data was collected on the different means of communication being used by the study community to address their communication needs in comparison with the use of the internet. To further determine if the needs were being addressed by the means, the researcher sought to identify the communication problems facing the community and the extent to which the internet can solve those problems. Finally the section presents data on the preference of the internet over other means of communication.

4.5.1 A Comparison of Internet Use and other Means of Communication

The study sought to draw a comparison between the different means of communication employed by the community within the Diocese, including the internet. The study found out that telephone call was the most commonly used means of communication in the diocese as indicated by the 301 respondents who said they normally use it. Short text messages (SMS) came second cited by 247 respondents, face to face communication was the third most commonly used means cited by 240 respondents and letters by 214 respondents. Internet came a distance fifth cited by

only 74 respondents as their used means of communication. Television was found to be the least preferred means of communication within the Diocese. Table 4.3 below indicates the summary of the results on means of communication. The total frequency exceeds the number of respondents in the study because it was a multiple response item.

Table 4.3: Means of Communication within the Diocese

	Frequency	Percent
Internet	74	5.8
Letters	214	16.9
Telephone calls	301	23.7
Short Message Service (SMS)	247	19.5
Publications	70	5.5
Books	33	2.6
Public addresses	41	3.2
Face to face	240	18.9
Radio	25	2.0
Television	24	1.9
Total	1269	100.0

The above table representing a comparative study on internet use in relation to ten other means of communication indicates a below average rating of the use of the internet to communicate within the Diocesan community compared to other means of communication. The scenario reflected by Table 4.3 may therefore probably be due to some factors impeding the adoption, adaption and use of the internet by the

community, and the accompanying constraints experienced by the community in such use which will be discussed later in this chapter.

Telephone calls and SMS topped most preferred means. While telephone is a modern means of communication, its evolution from landline to mobile, a wireless post-modern means, may explain the high frequency of use of telephone calls. The SMS in the same way is a post-modern means of communication that has emerged with the evolution of the telephone hence its high ranking close to telephone calls.

The high control and commercialization of the radio and the television and the huge costs required to invest in them is probably reflected in the low rating above. These are means of communication that require high expertise by users and large capital investments and local communities may be reluctant to adopt them for their local use. Many communities hence rely on national and international and commercial radios and television even though these may not necessarily address specific communities needs as they are more generalised and cover diverse communities spread across the globe. Thus, they might not be quite appropriate for specific local communities.

The low rating of the traditional means of communication, books and publications, is probably also due to their high cost of production in terms of time and money, and the high level of expertise required in their production. Such costs might very often be beyond the reach of a given local community. The time needed for reading books may also be a reason explaining the above situation.

When the respondents were asked if the preferred means of communication were adequate or not 63.8% noted that they were adequate while 36.2% noted the means were not adequate. This meant all the means combined. Going by the responses any one of the above means alone would not be adequate and therefore the need to use a combination of means to address the communications problems/needs of any given community. The fact that despite the use of all the mentioned means 36.2 % of the respondents felt they were inadequate indicates the existence of a communication problem within the study community. This elicits the question: Can appropriate use of the internet solve the existing communication problem within the community considering its potential capacity to address communication needs?

The following factors were cited by the respondents as having influenced their views and judgement on the various means of communication and whether they were adequate or not as indicated by their responses to reason (s) for their answer:

- Efficiency
- Accessibility
- Speed
- Affordability
- Most common means among the community members
- Ability to communicate any time.
- Ability by all members of the community to get information.
- Timeliness
- Confidentiality

- Level of expertise required
- Availability

4.5.2 Communication Problems Experienced by the Community

The study found the following to be the major general communication problems in the Diocesan community. Not getting necessary information was top on the list of challenges cited by 219 respondents, delays was the second major challenge cited by 214 respondents, high cost of communication and getting incorrect information was a distance third and fourth respectively. Total frequency exceeds number of respondents because it was a multiple response item.

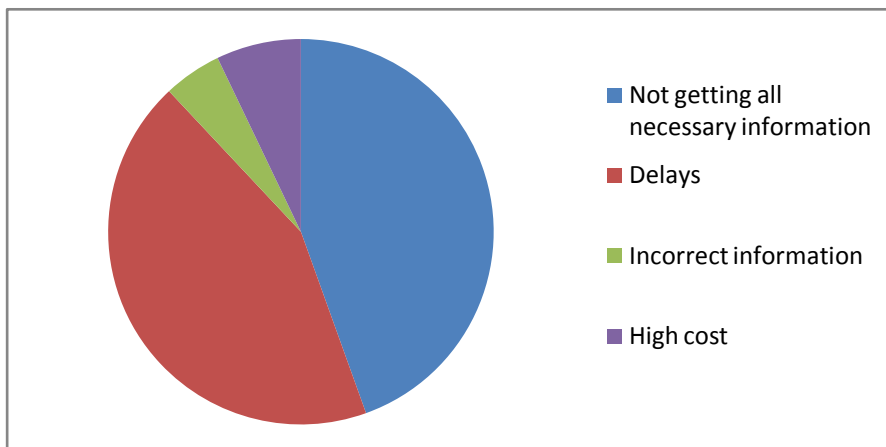


Figure 4.5: Communication Problems within the Diocese

Despite the Diocesan community having employed a number of means to address their communication needs as seen earlier (Table 4.3), the above communication problems continue to be experienced by the community in the indicated frequencies. Not getting all necessary information topped the list while delays ranked second. This situation evokes the question whether the internet if used appropriately would solve the said problems. The internet in its own right as a new media technology can solve

the problem of ‘delays’ which is major as shown on Figure 4.5 above, and ‘high cost’ which is not a major problem as the figure indicates. The internet is convenient and efficient and one can use it in their time and location as demonstrated in Section 4.4.1 in regard to access.

4.5.3 Extent to which Internet can Solve Communication Problems

Respondents were asked to give their views about whether internet had or could solve their communication problems. The responses were as follows; 5.6% said internet could solve their problems completely, majority (47.7%) stated that internet could solve their communication problems to a great extent, 37.6% said it could solve to an average extent, 7.6% to a little extent and 1% said it could not solve their problems at all. This is as shown in table 4.4 below.

Table 4.4: Extent Internet can Solve Communication Problems within the Diocese

		Frequency	Percent
Valid	Completely	22	5.6
	To a great extent	188	47.7
	To an average extent	148	37.6
	To a little extent	30	7.6
	To no extent at all	4	1.0
	Total	392	99.5
Missing	System	2	.5
Total		394	100.0

According to Table 4.4 a substantial number of respondents felt that the internet could solve communication problems in the Diocese to a significant extent while some thought it could solve completely. A small number thought it could solve to a little extent while only 1% of respondents felt it could solve to no extent at all.

Generally, more people feel the internet can solve communication problems, thus address communication needs to a considerable extent. By this they seem to acknowledge the potential of the internet in addressing their communication needs. However, as indicated on the above table, the internet alone although with a myriad of opportunities cannot address the communications needs completely thus the need for a combination of means as demonstrated earlier on Table 4.3. Even so, full employment of the internet by the Diocesan community would solve communication problems by approximately 80 % and by the same degree address their communication needs.

4.5.4 Preference of the Internet over other Means of Communication

Respondents were further required to rate their preference of the internet to other means of communication. On a scale of 1 for not at all, 2 for worse, 3 for equal, 4 for better and 5 for best, the results were as follows: internet and postal letters were rated as equal with a mean of 3.21, internet was rated as better when compared to telephone calls with a mean of 3.94, internet was rated as better when compared to text messages with a mean of 3.84 and internet was rated as equal to face to face communication and printed publications with means of 3.44 and 3.27 respectively. Table 4.5 below shows a summary of the results.

Table 4.5: Preference of Internet over other Means of Communication

	N	Mean
Postal letters	309	3.21
Telephone calls	316	3.94
Short Message Service (SMS)	305	3.84
Face to face communication	307	3.44
Printed publications	311	3.27

The findings reflected on the above table indicate more preference of the internet to telephone calls and short message service (SMS). In the earlier finding on the means of communication used within the Diocese (Table 4.3), telephone calls and text messages ranked first and second respectively, of the most used means. In reference to that, this analysis apparently suggests that if the internet were to be fully employed and all factors impeding its use controlled, then it would become the most used means of communication in this community and not as it emerged in this study.

4.6 Constraints and Potential Benefits of the Use of the Internet

The fourth objective was to establish the constraints and potential benefits of internet use among the community. This last section of the chapter provides data in relation to this.

4.6.1 Constraints of Internet use in the Diocese

When the study enquired to know the challenges facing the use of the internet for communication within the Diocese, the following were noted: availability was cited by 179 respondents as a challenge, technological expertise was identified as a

challenge by 150 respondents and affordability by 139 respondents. Lack of interest, language used, irrelevant content and lack of need were distant last among the challenges given by the respondents. Table 4.6 below shows the findings. Total frequency exceeds number of respondents because it was a multiple response item.

Table 4.6: Constraints of Using Internet to Communicate within the Diocese

	Frequency	Percent
Technological expertise	150	28.1
Affordability	139	26.0
Availability	179	33.5
No interest	28	5.2
No need	4	.7
Language used	19	3.6
Irrelevant content	15	2.8
Total	534	100.0

Availability is an extremely important factor controlling internet use locally as indicated above and is directly related to access (Section 4.4.1). A study on Internet Use among Community Leaders in Rural Kansas saw unavailability cited as the primary reason for not using the internet as other reasons came secondary. In the study 49.1% of the respondents said not having a computer that can operate internet was their sole reason for not using internet. Unfamiliarity with internet was given as reason by 26.2 of respondents, no training by 25.7%, cost by 24.7%, long distance to access by 21.0% and content by 14.5%.

The low degree of importance accorded to the constraints of language used and content is probably due to the fact that the respondents showed high levels of literacy

and the fact that the language used on internet is flexible. With regard to content, it might have been regarded with less importance because users of the internet are able to generate their own content.

4.6.2 Potential Benefits of using the Internet by the Diocesan Community

Finally, to investigate the potential benefits of internet use to the community, respondents were asked to rate the internet in terms of the following various aspects. The kind of rating given to an aspect indicates whether the respondents viewed it as a benefit or constraint.

In terms of availability the internet was rated as fair with a mean of 2.17, in terms of accessibility it was rated as fair with a mean of 2.20, in terms of affordability it was rated as expensive with a mean of 2.42, in terms of need in the diocese it was rated as quite needed with a mean of 3.36, in terms of knowledge and expertise it was rated as average with a mean of 2.35, in terms of interest in the medium internet was rated as good with a mean of 2.54, in terms of convenience it was rate as good with a mean of 2.74, in terms of efficiency it was rated good with a mean of 3.02, in terms of speed it was rated as good with a mean of 2.98, capacity good with a mean of 2.62 and effectiveness was also rated as good with a mean of 3.03. Below is a summary of the results.

Table 4.7: Internet Rating in Relation to Various Aspects

	N	Mean
Rating of the internet in terms of availability	346	2.17
Rating of the internet in terms of accessibility	344	2.20
Rating of the internet in terms of affordability	346	2.42
Rating of the internet in terms of need in the diocese	346	3.36
Rating of the internet in terms of knowledge and expertise	342	2.35
Rating of the internet in terms of interest in the medium	344	2.54
Rating of the internet in terms of convenience	344	2.74
Rating of the internet in terms of efficiency	345	3.02
Rating of the internet in terms of speed	346	2.98
Rating of the internet in terms of capacity	346	2.64
Rating of the internet in terms of effectiveness	346	3.03

The above rating goes on to provide a general picture of the Catholic Diocese of Eldoret community's view of the internet as a communication medium. The ratings of need, efficiency and effectiveness are high with mean scores of over 3 in a scale of 1 to 4. Respondents felt the internet was quite needed as it is efficient and effective, which are some of the benefits of its use. Speed, capacity and convenience were also rated highly with mean scores above 2.5 while the community respondents' rating in terms of interest in the medium and was just average. Notably, technological expertise, availability, accessibility and affordability were rated lowly, below the mean of 2.5, among the 11 aspects of internet that were examined. These four aspects with low rating are elsewhere identified as this community's main constraints of internet use.

From the above ratings one can conclude that while some aspects of internet use are regarded as benefits in some communities, in others they are constraints. Communities in the world do not therefore have the same view of the internet. Internet use by communities can thus be enhanced by changing how a particular community views the internet in terms of such aspects as presented above. This would entail converting the constraints into benefits by addressing the issues surrounding such constraints.

4.7 Conclusion

This Chapter has addressed extensively all the objectives of this study and expounded on the various important variables of the study including the two key variables of “Internet use” and “Community’s communication needs”, hence provided a deeper understanding of the subject in question. These important findings are consequently the basis of the conclusions that follow in the next chapter. The findings have definitely added to the knowledge on local communities’ communication needs and new media technologies, particularly the internet, and factors controlling their use by communities to meet their communication needs. The findings must have also laid a fertile ground for further related studies in future.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSION AND CONCLUSIONS

5.1 Introduction

This chapter provides a summary of the findings, discussion and conclusions made from the study. A number of recommendations resulting from the findings and conclusions have also been made towards the end of the chapter as well as suggestions for further research in this area and related areas following the identification of gaps in the course of the study.

5.2 Summary of Findings

The main findings of this study, which have been presented in detail in Chapter Four, are given in this subsection in a summarised form and in order of the objectives.

5.2.1 Local Community's Communication Needs

In terms of communication needs, the study identified information on faith or spiritual and pastoral information as the most needed by the Catholic Diocese of Eldoret community thus their priority communication need. Other unique communication needs besides those listed emerged like job openings, liturgical information, daily news, breaking news relating to church matters and reports on on-going catechists' programmes in the Diocese.

5.2.2 Use of the Internet among the Local Community

With regard to internet use among the local community, the study found out that the members of the study community with an understanding of the internet range across different age groups with no specific group indicating more use than the other. The study also revealed that more male than female understand and use the internet. On

the other hand, education proved to be an important factor in understanding and using the internet as majority of the respondents had tertiary and university education.

In terms of the communication media used by the community, a variety of means, both traditional and modern, are applied to address the community's communication needs, among them the internet. The study identified cybercafés as the most common points of internet access among the study community. The study further found that more rural respondents access the internet at cybercafés compared to their urban counterparts whose top place of access is their home.

The wireless kind of internet connection is the most widely used while a majority of those who use the internet use it on a weekly basis. However, a disparity in this trend was noted when the rural and urban parishes were set apart as this frequency trend replicates only among the urban population of the community. A majority of those in the urban parishes access internet on a weekly basis while on the other hand, a majority of those in the rural parishes access internet on a monthly basis. With regard to factors determining the frequency of internet use among the community members, need(s) for communication surpasses all other factors like accessibility, affordability and expertise. The study also found out that internet use across different geographical levels, diocesan, national and global is almost uniform as respondents use it often to communicate at all the three levels.

5.2.3 Extent to which the Internet Addresses the Communication Needs

The study found out that the community continues to experience considerable communication problems mainly 'Not getting all necessary information' and 'delays' despite the internet being used to communicate at the local level and a combination of

other means communication. This clearly presents a communication problem within the local community. A majority of the respondents thought the internet could solve the community's communication problems to a great extent if appropriately adopted. The following factors were cited as the main considerations in judging the adequacy or inadequacy of a given medium: efficiency, accessibility, speed, affordability, commonality, ability to communicate any time, ability by all members of the community to get information, timeliness, confidentiality, level of expertise required and availability.

5.2.4 Benefits and Constraints of Internet Use within the Community

Unavailability is the greatest single constraint of internet use within the study community followed by technological expertise and affordability respectively. In terms of benefits, the internet is rated highly in terms of how much it is needed in the community, and in terms of convenience, efficiency, capacity, speed and effectiveness.

The following table shows the above information in summary.

Table 5.1: Summary of Findings

Objective	Findings
1. To identify the communication needs of the Catholic Diocese of Eldoret community.	- Spiritual and pastoral information are the priority communication needs of the community.
2. To examine the use of the internet among the community.	- Generally, the community members have an understanding of the internet and use it to communicate across different levels, global, regional and local; use cuts across gender and age.
3. To determine the extent to which the internet has addressed the communication needs of the community.	- The internet has not addressed the community's communication needs to any significant level and is ranked lowly among other communication media in terms of use. Therefore the community continues to experience inherent communication problems.
4. To establish the potential benefits and constraints of internet use among the community.	- Unavailability is the greatest constraint of internet use among the community, followed by technological expertise and affordability. The community acknowledges that the internet is highly beneficial in terms of convenience, efficiency, capacity, speed and effectiveness.

5.3 Discussion

The following is a discussion of the findings of the study in terms of the local community's communication needs, internet use in the community, extent to which it has addressed the community's communication needs and the potential benefits and constraints of internet use in the community.

5.3.1 Local Community Communication Needs

In seeking to determine the use of the internet in addressing the local community's communication needs in the Catholic Diocese of Eldoret, it was important for this study to first identify the communication needs of the study community. Consequently, this automatically became one of the objectives of this study. The main finding with regard to this objective was that information on faith or spiritual and pastoral information were the main communication needs of the Catholic Diocese of Eldoret community as they were prioritised among others. This finding defines the uniqueness of the Catholic Diocese of Eldoret as a religious community hence the need by members to share spiritual and pastoral information.

Other studies that have been carried out in different parts of the world, seeking to establish the communication needs of various local communities, have produced almost similar results as different communities have proved to exhibit specific communication needs depending on the type of community, for example agricultural, health and business communities have revealed unique needs for each community. A survey on *Internet Use Among Community Leaders in Rural Kansas* (Wilson and Boone, 1998), singled out varying uses of the internet among the different groups of the rural community leaders. For rural Chambers of Commerce, the internet was viewed as an electronic means to market their communities worldwide, for city and

county governments, the internet was seen to provide a unique means of communicating with constituents and external resources, while for individual businesses, the internet offered opportunities for electronic commerce.

The reasons for these specific uses of the internet by the particular groups or communities could also be interpreted to mean their communication needs. These are the needs that come with the requirement for such groups or communities to share information that is common among the members. Quebral (1981) gives a general definition of the communication needs of any community, whether local, regional, national or international, as those that revolve around companionship with other human beings, access to problem solving information for daily living, participation in the decisions that affect its members, access to education and culture that will develop individual capacities, and entertainment.

Another survey on *Rural Communities and their Communication Needs in Uganda* identified understanding HIV/Aids, keeping in touch with family and friends, news and contacting people in emergencies as the communication needs of the community (Scott, et.al, 2008). In *Analysing ICT Use and Access Amongst Rural Women in Kenya*, Kituyi-Kwake and Adigun (2008), identified unique information needs among the rural women which were as diverse as the fields were, that is, in education, health, business and trade, agriculture and social welfare. This study serves to confirm that each community has its own distinctive communication needs with no exception. The Catholic Diocese of Eldoret, as a community of faithful has shown to have its own unique communication needs that demand address through various communication media technologies. Therefore, with this knowledge that communication needs differ

from one community to another, communication professionals working in various areas should make identification of those needs a regular exercise. This means conducting such exercises even for the various groups that constitute organisations as these are also communities by virtue of their sharing some things in common, hence the need to share information among themselves.

The *World Bank Development Communication Source Book* (2008) asserts that identification of a specific community's communication needs is a prerequisite to a successful development communication strategy. Furthermore, the fact that development communication is goal oriented and purposive (Kumar, 2011), identification of needs before undertaking any development communication process ensures focused communication and eventual attainment of intended goals.

5.3.2 Use of the Internet among the Local Community

Having identified the communication needs of the study community that demand address using various media, the study went ahead to examine the use of the internet as a new communication medium that would address the community's communication needs. Deriving from this objective, the general finding of the study was that although the internet is the most preferred means of communication among the community, it is ranked lowly in terms of use to communicate in the study community compared to other media. Among ten different means being used to communicate among the community of the Catholic Diocese of Eldoret, both traditional and modern, the internet ranked at a distant fifth.

The fact that the internet is barely used to communicate among the study community is nevertheless supported by the literature in Chapter two on 'Factors Controlling

Internet Use by Communities'. However, it is worth noting here that among all the factors described in the Literature Review as controlling internet use by communities, this study revealed that age might not be a factor after all as internet use cut uniformly across all age groups who participated in this study.

The phenomenon of low internet use presented by this finding could also probably be due to the fact that internet as a new communication media is still in its early stages and therefore not fully adopted in some parts of the world. There are still many communities in the world that continue to use traditional media for development purposes as a majority of people, for example in India, have low exposure to the new media channels (Kumar, 2011). The much hyped benefits of the internet are therefore yet to be realised by all human individuals and communities and it is yet to be seen how much longer it will take before all communities in the world can savour its potential benefits. Like all other emerging media, the internet is still evolving and its full impact will evolve over time depending on how people use it (Campbell, et al, 2007). The internet is thus no different from other media technologies whose adoption by different communities in the world has been uneven.

The choice of the internet for this study was deliberate despite there being many other media at the community's disposal. This is because although traditional and modern means of communication have been used to address such communication needs among communities all over the world, changes continue to occur in communities and societies as a result of rapid development and newer methods of communication and media technologies must be used to keep the pace with developmental changes. Addressing communities' communication needs is no exception and although

traditional and modern means of communication have served communities well in the past, it is imperative that in this era of information age communities everywhere in the world adopt these new media technologies to serve their needs. Colle (1995) aptly captures this sentiment in his article, "Assessing Communication Needs for Development in Africa" where he states that it is an age of communication, a fact that must be part of planning for health, food supply, environment protection and economic well-being, from towns and villages in Kenya to the urban areas in Ghana.

Also, the internet as a post-modern means of communication has a wide range of uses and combines the uses for both the traditional means and the modern means of communication. It therefore occupies a significant place in the new media technologies. In addition, as much as the internet is frequently used to communicate at the global and national levels, which are vast distances, the internet is also used to communicate at the local level which is a nearer distance. This means that the benefits that have been realized by the use of the internet over vast distances across the world could also be realized by using the same medium at the local level.

Existing theories on new communication technologies, Communication Technology Determinism and Information Age/Society theories, (McQuail, 2000) suggest that communities automatically adopt new technologies when they emerge, a proposition that is not necessarily true. As indicated, the major finding of this study contradicts these two theories that seem to suggest that all communities in the world should be using the new media technologies, particularly the internet. These theories fail to address other factors and variables that affect full exploitation of communication technologies in addressing particular communities' communication needs. This study

is therefore a manifestation that all communities in the world do not automatically adopt new technologies as they emerge as the two theories propose. Similar sentiments are captured by some of the critics of these theories who argue that specific groups of society do not respond to emerging technologies the same way. For instance the Communication Technology Determinism theory, although applicable across many parts of the world, does not take into account those societies that are always left behind or passed by new technologies for various reasons (Schement and Curtis, 1995).

On the other hand, the information age/society theory posits that the production and distribution of information of all kinds become a major sector of the economy of the information age/society (Williams, 2003). As such, communities in the information society age are expected to provide the required infrastructure and other necessary resources for processing and disseminating useful information, this way, paying special attention to information and communication needs of their members. As this study found out, institutions like schools and colleges in the Diocese have notably made significant effort to provide internet access in their areas while work stations have also provided modest access to a section of the community.

With regard to the above, Communication Scientist Everette Denis (1992) posed this overarching question: “Will computer networks be readily accessible to all people, even if it means depending on institutions such as schools, churches and community organisations...?” Apart from cyber cafes which are private commercial internet centres, many people depend on public establishments like learning institutions, churches and community organisations to access internet because such institutions

have the resources to afford such services compared to individual persons. This analysis brings to the fore the issue of technological disparity between the 'information haves' and 'information have nots' (Baran, 2004).

5.3.3 Extent to which the Internet has Addressed the Communication Needs

As mentioned earlier, different means of communication have been used to address the communication needs of communities in the world. This study, again, sought to determine the extent to which the internet has addressed the communication needs of the Catholic Diocese of Eldoret Community. Already, judging from the low degree of internet use by the study community and the little priority accorded to it as seen in the earlier sub-section, it is almost evident that the internet has not addressed the local community's communication needs to any considerable extent.

The findings arising from this objective also help to affirm this. This study community continues to experience various communication problems despite their continued use of the traditional and modern means of communication. Some of the problems include 'not getting all necessary information' and 'delays'. While some communication problems like 'not getting all necessary information' cannot be solely blamed on a particular communication medium, a problem like delay could be as a result of the medium in use. The communication problems being experienced by the local community here could therefore be partly attributed to the community's low degree of internet adoption and use or inappropriate use. According to Kumar (2011), mere physical access to a communication medium does not help, it is necessary to have operative accessibility to community media. This means a community must have some degree of control over a particular medium for it to address their needs. This evokes the factor of technological expertise among the local community so that the

members are even able to feed relevant content to the medium where available and ensure participation by all of the community members.

The fact that the use of the internet at the local level in the investigated community does not necessarily translate into it addressing the community's communication needs as revealed in Section 4.5.1 (Means of communication within the Diocese) of this report may probably be due to lack of relevant local content in respect to the given community and failure by the community members to adapt it innovatively to suit their communication needs. Most new technologies have innovative potential unlike the older media (McQuail, 2000). A report, *Promoting the Internet in South Asia* (1999), recommended uploading content which has a wider relevance to the local community in promoting internet use among local communities. Yet another report, *Wireless Minneapolis Community Benefits Agreement* (The Digital Inclusion Coalition, 2006), found that availability of relevant local content would motivate members of a given local community to use the internet as it would address their needs. Making available in the internet content that is relevant to a given local community is therefore one way of adapting it innovatively to the needs of the community, hence enhancing its benefits to the community and solving its communication problems.

While the internet has the potential to address the above mentioned problems in its own right as a medium of communication, the problems of 'not getting all necessary information', which is enormous, and 'incorrect information' are dependent on the users of a given medium and the use they put the medium into, a proposition supported by the critics of the 'communication technology determinism theory'. The presence of a given communication medium within a local community therefore,

however efficient, does not necessarily translate into solving the community's communication problems. Solving the latter problems in this case would call upon the respective community members and not the said medium per se. The community of the Catholic Diocese of Eldoret therefore must take the initiative to address the problems by using the media effectively. Just as a given communication medium has capacity to address specific communication needs, a community that applies the medium has a role to play.

Observers and critics of the communication technology determinism theory have addressed the ability of new innovations (including new media technologies) to address society needs. They argue that effects of new innovations occur only when innovations are taken up, developed and applied, usually to existing uses at first, then with great extension and change of use according to the capacity of the technology and needs of the society (McQuail, 2000). Consequently, needs are very important drivers of new media technologies and determine the direction they take. Thus, if only a new media technology was innovatively adapted to a given community's communication needs, other factors would be relegated to the margins or rendered insignificant altogether. Also, as seen earlier, communication needs differ from one community to another and so should be the application of communication media.

Therefore communication media cannot be applied in the same way in all communities in the world and purport to address communication needs. More effort should be put by the individual communities to align the media to their needs. Internet use varies from community to community and from individual to individual and the use to which a community or individuals put the internet into is largely

dependent on them. As Campbell, et al (2007) puts it, is upon individuals and communities to adapt the internet to their local needs.

5.3.4 Constraints and Benefits of Internet Use among the Community

In view of the communication problems being experienced by the study community and failure by the community to adopt the internet to address its needs despite the myriad communication opportunities it offers over the older media, another objective of this study was to establish the constraints that may have impeded the adoption of the internet by the said community. Consequently, the study established three major constraints of internet use in this particular community. These include, in order of importance: Unavailability, technological expertise and affordability. Addressing these constraints would enhance internet use by the study community and solve the resultant communication problems that inspired this study. How internet use by communities can be enhanced is well documented and was discussed in Chapter Two of this thesis (see section 2.4.4).

This finding on constraints is not strange as many previous studies on internet use among communities have produced similar results. For example, this finding concurs with the finding of a study on *Internet Use among Community Leaders in Rural Kansas* (Wilson and Boone, 1998) where unavailability was cited as the primary reason for not using the internet. Also, according to The Digital Inclusion Coalition Report (2006) in Minneapolis, which focused on closing the digital divide, many of the digitally disenfranchised do not have the skills or confidence to fully benefit from a computer or internet access even if it is available. It is easier for communities to adopt a technology when they fully understand it and its value. Enhancing technology

literacy would therefore help communities to make effective use of the internet, when and where it is available to address their communication needs.

Affordability, ranked third most significant constraint, has been cited as one of the leading factors controlling internet use by communities (McQuail, 2000). This constraint arises from lack of material resources to acquire the new technologies making it hard for the community to adapt to the new technologies. According to the National Information and Communications Technology Policy (2006), the lack of adequate Information and Communications Technology (ICT) infrastructure has hampered provision of efficient and affordable ICT services in the country. This calls upon the government and other organisations to set up the basic infrastructure needed to enable internet use. Although considered fairly affordable, the rising rate of commercialization of the internet is impacting negatively on its access by local communities. However, as Gringras (1997) argues, you do not need to be rich and powerful to have a presence on the www (World Wide Web). Not all efforts to commercialise the internet have been effective and it is still accessible to many individuals and communities compared to other traditional media. As a result, the free trade of information on the internet continues (Campbell 2007).

In terms of benefits, the study established that the Catholic Diocese of Eldoret community acknowledges the potential benefits of internet use as it was ranked highly in terms of convenience, efficiency, capacity, speed and effectiveness. This is in line with existing literature on Internet use by communities where it has been described as very effective and efficient (Campbell, 2007), among other innumerable potential benefits. The Catholic Diocese of Eldoret community acknowledges this fact as a substantial number of respondents felt that the internet could solve the community's

communication problems to a significant extent hence address their communication needs.

The benefits and constraints of internet use are well documented in literature and some of these have been detailed in Chapter Two of this thesis. This means that communities in different parts of the world are faced by similar or almost similar challenges in trying to adopt the new media technologies, in particular the internet. What differentiates the various communities therefore is probably how a particular community responds to and addresses such constraints to fully enjoy the benefits of the new media technologies. The time the given community takes to address these constraints also separates one from the others as some move with speed while others lag behind for reasons such as resources available to them. The proponents of the Communication Technology Determinism theory and the Information Age/Society theory should therefore appreciate the fact that communities in the world do not necessarily evolve with emerging communication media technologies at a uniform pace.

5.4 Overall Conclusions

In conclusion, this study has achieved its main purpose which was to identify the community's communication needs, examine the use of the internet among the community, determine the extent to which the internet addresses the community's communication needs and establish the constraints and potential benefits of internet use to the community. Consequently, drawing from the above objectives and the resultant findings, the following conclusions have been made:

Despite the community of the Catholic Diocese of Eldoret having employed many different means of communication, there still exists a significant gap in their use to address the community's communication needs. The existing gap can be comprehensively addressed by effective application of the internet by the community. Full adoption of the internet by the study community can solve their communication problems by approximately 80%, therefore address their communication needs. If the internet were to be adopted fully in the community, it would probably be the most commonly used means of communication in the community as it is preferred to telephone calls and text messages, which ranked first and second most used means within the community. While the internet may not singularly address all the community's communication needs since an integration of means is necessary, its relegation compared to other older media, as demonstrated by its low rating among the different means of communication being used by the community, is an issue of concern in this information age. Internet accessibility in parishes which are the main centres of the community under study is very low, almost nil.

One can therefore argue that the new media technology of the internet has not influenced or transformed much the study community despite this being an information age/society. The characteristics of an information society do not match the findings in this study where older media technologies are still more popular than the newer technologies despite their inadequacy in addressing the study community's communication needs. This negates the propositions in the two theories that inspired this study, Technology Determinism and Information Age/Society theories, because despite the existence of the internet and its wide use in the world, its use by the community investigated has not transformed it. In other words, the terms post-modern

society or information age/society cannot be rightly used to describe this particular community judging from the findings.

This argument is supported by the critics of the two theories who argue that communities in the world do not automatically adopt new media technologies as they emerge due some impeding factors. Hence some communities continue to experience communication problems despite the presence of such media. Development Communication scholars have elsewhere argued that mere physical access to a communication medium does not help; and communities need operative accessibility to community media for it to serve their needs. Therefore, only when media technologies are appropriately adopted by communities can they address their communication needs, and subsequently solve their communication problems.

The overall conclusion therefore is that the emergence of new media technologies does not necessarily translate into their use in addressing local communities' communication needs and in turn development. In other words, the emergence of new media technologies cannot be generally equated with development of specific local communities. So, in order for development to occur new media must be adapted to the communication needs of specific local communities which, as this study has proved, vary from community to community. Communication media cannot be applied across all communities in the same way, a fact that calls upon communication experts to understand well the communication needs of a community and knowledge of the medium in use. In this, particular local communities have also an active role to play in making their needs understood, aided by communication professionals. Application of new media technologies among communities should not be left to inventors alone, as

doing this will leave many communication needs unaddressed. As a result, communities will continue to experience inherent communication problems despite the existence of a range of communication media with capacity to solve the problems and will not quite enjoy the benefits of emerging technologies.

Also, community's communication problems cannot be blamed on communication media technologies alone, but also the respective community. A community's input and effort are required to solve some problems like incomplete information and incorrect information while a medium such as the internet can solve problems like delays and high costs. Thus, although the internet has great potential for addressing a given community's communication problems, a communication medium alone cannot solve such problems.

Out of this study the researcher discovered that traditional media, including the old print media are still being extensively used by individuals and organisations for their communication needs despite the emergence of new media. This is surprising considering the much hype accorded to the new media especially the internet coupled with the inadequacies of the old media. This status leaves room for further research on the internet as a communication medium and how it is viewed with regard to addressing instrumental needs and its benefits to communities. In addition, may be further comparative studies on how other communities address their needs, including social groups, would tell whether the internet is gradually becoming more of a social media that its instrumental uses are decreasing.

5.5 Recommendations

In view of the findings of this study and the foregoing conclusions, the following is recommended:

- In reference to the first objective, the researcher identified this particular study community's special communication needs. Therefore it is recommended that the community leaders should provide the relevant information needed by its community members on the internet through various ways like websites, blogs, youtube, and social media accounts like facebook and tweeter, among others, and put in charge people with the necessary skills to update these sites 24 hours. This includes uploading as much information about the community as possible. The leaders should also create interest in these new media and generate the same among the community members.
- In terms of the level of internet use in the community, it was established that the internet has been relegated to the margin compared to other means of communication. Therefore, in order to encourage more application of the new media technology in the community, The Catholic Diocese of Eldoret should take up the internet and adopt it to her community's communication needs as this has not been done to a large extent. This includes sensitizing the community more about the new media technology and encouraging its use. Thus all parishes should establish computer literacy centres where the internet should be factored. The Diocese should also communicate more through the internet to make more people use it. More people with internet technological expertise should be employed to manage such communications. The community members should be encouraged to

have email addresses at the personal and institutional level like parishes and sub-parishes.

- To address the major constraints of availability and affordability identified in this study, it is recommended that the Catholic Diocese of Eldoret makes it a policy that all its parishes, departments, religious houses and institutions like schools and hospitals have computers and install internet in an effort to make internet more available and accessible to a majority of community members. Computers should also be supplied to all parishes and other institutions with internet connections so that many people can have access including those who cannot afford it in normal circumstances. The community leaders should also set up cybercafés and provide internet at a subsidised cost to the community members. More members of the community should also be encouraged to buy internet enabled phones, I-pads and laptops in order to be able to access the internet anywhere, anytime. Such should also be provided. Therefore more resources should be allocated to internet use.

5.6 Suggestions for Further Research

- In relation to the first objective, the study revealed that spiritual and pastoral information needs are the priority communication needs of the study community. In this regard, the researcher suggests further research in the rest of the counties (Nandi and Elgeyo/Marakwet) that constitute the Catholic Diocese of Eldoret community as due to time and financial constraints, the study was confined to Uasin Gishu County whereas the community is quite expansive. Such further research would be useful in corroborating the findings of this study.

- Regarding internet use by the community, the study found it to be marginal. In this case, since the community studied does not exist in isolation within the study area, it is suggested that further comparative studies be done on other communities in the same area such as business, agricultural or educational communities, or still religious but with different inclination, to ascertain if the phenomena is the same or would be different among different communities within the same geographical area. Also, since the study localised internet use by communities, further research could also be conducted on the community's media use to communicate at other levels, other than the local level studied. For instance, is the preference of the different means to address communication needs at the local, national and global levels similar, or would one medium be preferred over another depending on the level at which the community members are communicating?
- In terms of the extent to which the internet has addressed the community's communication needs, the study revealed that the internet has not been applied to any considerable extent. In this view, because the internet was singled out among other communication media, the researcher suggests further research on the extent of application of other media to address the said communication needs. Such a study could also include other aspects of internet use among communities including its interaction with other media, media participation and community enhancement among others. This might reveal whether the internet is gradually turning into a mainly social media and not being used to serve communities' instrumental communication needs.

5.7 Conclusion

This final chapter of this thesis has presented in summary the findings of this study and the discussion arising from the findings together with conclusions and recommendations. The information has provided useful insights into the subject of internet use in addressing the communication needs of local communities and pointed out gaps that need address in practice and in theory. The information provided here is definitely expected to elicit further enquiries and discussion into the area and this will be very welcome as it will lead to generation of more knowledge and understanding of the subject and better application of new media technologies by local communities worldwide.

REFERENCES

- Akinsola, O. S., Herselman M. E. and Jacobs, S. J. (2005). "ICT Provision to Disadvantaged Urban Communities: A Study in South Africa and Nigeria." In *International Journal of Education and Development using Information and Communication Technology*, 2005, Vol.1, Issue 3, 19-41.
- Baran, S. J. (2004). *Introduction to Mass Communication: Media Literacy and Culture*, 3rd Edition. New York: McGrawHill.
- Barbara, L. L. (2007). "Architecture of Commitment: Back and Forth Flow between a Community and its Members." In *Journal of Community Psychology*, Vol.12, Iss.4, August, 1388-1408. <http://www3.interscience.wiley.com>
- Benedict XVI. (2009). *New Technologies New Relationships: Promoting a Culture of Respect, Dialogue and Friendship*. Vatican.
- Bessette, G. (1995). "Development Communication: A Conceptual Framework." In C. Okigbo (ed), *Media and Sustainable Development*. Nairobi: African Council for Communication Education.
- Campbell, R., Martin, C.R. and Fabos, B.G. (2007). *Media and Culture: Introduction to Mass Communication*. Boston: Bedford/St. Martin's.
- Carey, J.W. (1998). "Marshall McLuhan: Geneology and Legacy," In *Canadian Journal of Communication*, 23, 293-306.
- Catholic Diocese of Eldoret. (2012). *The Catholic Diocese of Eldoret Third Master Plan: 2012-2016*. Eldoret: Catholic Diocese of Eldoret.
- Catholic Diocese of Eldoret (2010). *The Catholic Diocese of Eldoret Communication Policy*.
- Colle, R.D. (1995). "Assessing Communication Needs for Development in Africa." In C. Okigbo (ed), *Media and Sustainable Development*. Nairobi: African Council for Communication Education.
- David, W. M. and David, C. C. (1986). "Sense of Community: A Definition and Theory." In *Journal of Community Psychology*, Vol.14, Iss.1, January. <http://www3.interscience.wiley.com>
- Dennis, E. E. (1992). *Of Media and People*. Newbury Park, CA: Sage.
- Dominick, J. R. (1994). *The Dynamics of Mass Communication*. New York: McGrawHill
- Dutta-Bergman, M. J. (2006). Community participation and Internet use after September 11: Complementarity in channel consumption. In *Journal of Computer-Mediated Communication*, 11(2), article 4. <http://jcmc.indiana.edu/vol11/issue2/dutta-bergman.html>

- FAO. (1996). *The Internet and Rural and Agricultural Development: An Integrated Approach*. <http://www.fao.org/docrep/w6840e02>
- Foley, J. P. (2000). *Ethics in Communications*. Nairobi: Paulines Publications Africa.
- Gillwald, A., Milek, A. and Stork, C. (2010). *Gender Assessment of ICT Access and Usage in Africa*. Vol. 1. 2010 Policy Paper 5. researchICTAfrica.net.
- Goulder, A. (1976). *The Dialectic of Ideology & Technology*. London: MacMillan.
- Gringras, C. (1997). *The Laws of the Internet*. London: Butterworths.
- Haythornthwaite C. (2002). *The Internet in Everyday Life*. Oxford, UK: Blackwells. http://www.scientificblogging.com/news_articles/social_networking
- Kituyi-Kwake, A. and Adigun, M. O. (2008). "Analysing ICT Use and Access amongst Rural Women in Kenya." In *International Journal of Education and Development using Information and Communication Technology*, 2008, Vol.4, Issue 4, 127-147.
- Kombo, D. K. and Tromp, D. L. A. (2006). *Proposal and Thesis Writing: An Introduction*. Nairobi: Paulines Publications Africa.
- Kumar, R. (2011). "Development Communication: A Purposive Communication with Social Conscience – An Indian Perspective." In *Global Media Journal-Indian Edition*, Vol. 2, No. 2. <http://doonuniversity.ac.in>
- Mansell, R. and Wehn, U (eds). (1998). *Knowledge Societies: Information Technology for Sustainable Development*. New York: Oxford University Press.
- Margherio, L. (1998). *The Emerging Digital Economy*. Washington DC: US Department of Commerce. <http://www.ecommerce.gov/emerging.htm> (NTIS No.PB98-1370).
- Mayhew and Richardson (1996). *Rural Internet Users in North America*. FAO. <http://www.fao.org/docrep/w6840e02>
- McQuail, D. (2000). *Mass Communication Theory*, 4th Edition. London: Sage Publications.
- Mefalopulos, P. (2008). *Development Communication Source Book: Broadening the Boundaries of Communication*. Washington, D.C.: The World Bank.
- Mehta, A. and Akhtar, S. (1999). "Promoting Internet in South Asia." In *Economic and Political Weekly*, Vol. 34, No. 46/47. <http://www.jstor.org>
- Ministry of Information and Communications (Kenya). *National Information and Communications Policy (2006)*. Nairobi.

- MIT New Media Action Lab (2009). *A Recent Survey on Internet Usage and Communication Needs of NGOs in China*.
<http://hausercentre.org/chinanpo/2009/7/a-recent-survey-on-internet-usage-and-communication-needs-of-ngos-in-china/>
- Morris, M. and Ogan, C. (1996). "The Internet as Mass Medium." In *Journal of Communication*. 46 (1): 39-50.
- Mosha, L. (1981). "The Need for Research in Christian Communication in Africa." In R. Hofmann et al (eds), *Communication SocialisYearBook*, 1981-1982, 156-171. Rome: Pontifical Commission for Social Communications.
- Mugenda, A. G. (2008). *Social Science Research: Theory and Principles*. Nairobi: Applied Research and Training Services.
- Mugenda, O. M. and Mugenda, A. G. (2003). *Quantitative and Qualitative Approaches*. Nairobi: Acts Press.
- Ochieng, L. (2013). "AU Cyber Security Proposal Criticised." In *Sunday Nation*, October, 20, 2013,46.
- Okech, A. (1989). "Church Use of Mass Media for Development." In J. T. Agbasiere & B. Zabajungu (eds), *Church Contribution to Integral Development*. Eldoret: AMECEA Gaba Publications.
- Peterson, N. B. (2009). "Computer and Internet Use in a Community Health Clinic Population." In *Medical Decision Making*. Vol. 29, No. 2, 202-206.
peterson@vanderbilt.edu
- Pool, I. (1983). *Technologies of Freedom*. Cambridge, MA: Belknap Press.
- Poster, M. (1999). 'Underdetermination', *New Media and Society*, 1 (1).
- Quebral, N. C. (1981). "Community as Communication." In R. Hofmann et al (eds), *Communication SocialisYearBook*, 1981-1982, 151-155. Rome: Pontifical Commission for Social Communications.
- Schement, J. and Curtis, T. (1995). *Tendencies and Tension of the Information Age*. New Brunswick: Transaction Publishers.
- Schuler, D. (1996). *New Community Networks Wired for Change*. New York: Addison Wesley.
- Scott, M., Diamond, A., and Smith, B. (1997). *Opportunities for Communities: Public Access to Networked Information Technology*. Canberra: Department of Social Security.
- Scott, N. et al. (2008). *Rural Communities and Communication Needs in Uganda*. UK: Grameen Foundation AppLab.

- Sharma, G.R. and Arya, H.P. (2005). "Correlates of Perceived Benefits of Livestock Farming Through Internet Communication." In *African Journal of Livestock Extension*. Vol. 4, 38-41.
- Staroevska-Slabera, K. (2002). "Toward a Community-Oriented Design of Internet Platforms." In *International Journal of Electronic Commerce*, Vol.6, No. 3, 71-95. Communities in the Digital Economy. <http://www.jstor.org/stable/27751024>
- Sussman, G. (1997). *Communication, Technology and Politics in the Information Age*. Thousand Oaks, CA: Sage.
- Tan, M. and Teo, T.S (1998). "Factors Influencing the Adoption of the Internet." In *International Journal of Electronic Commerce*. Vol. 2, No. 3, 5-18. <http://www.jstor.org/stable/27750854>
- The Canon Law Society Trust (1983). *The Code of Canon Law (English Translation)*. London: Collins.
- The Digital Inclusion Coalition. (2006). *Recommendations for the Wireless Minneapolis Community Benefits Agreement*. <http://www.metrostability.org/efiles/wireless-CBA-Recommendations>.
- Webster, F. (1995). *Theories of Information Society*. London: Sage Publications.
- Whiteley, S. (2007). *e-Business Basics – Metcalfe's Law and the Networked Economy*. tutor2u.net
- Williams, K. (2003). *Understanding Media Theory*. London: Arnold.
- Wilson, R. and Boone, K. (1998). *Internet Use Among Community Leaders in Rural Kansas*. www.ksu.edu/huckboyd
- Winston, B. (1986). *Misunderstanding Media*. Cambridge, MA: Harvard University Press.

APPENDICES

APPENDIX I: DESCRIPTION OF THE CATHOLIC DIOCESE OF ELDORET

VISION

To be an instrument of God's love, peace and reconciliation in society.

MISSION

The Catholic Diocese of Eldoret is committed to evangelisation, multicultural cohesiveness, Christian stewardship and integral human development.

DESCRIPTION

The Catholic Diocese of Eldoret is located in the North Rift Region of the Great Rift Valley of Kenya, approximately 320 km from the capital, Nairobi. It was established in 1953 as an Apostolic Prefecture and in 1959 became the Diocese of Eldoret. The Catholic Diocese of Eldoret covers the counties of Uasin Gishu, Elgeyo/Marakwet and Nandi with a total area of 9,254 square kilometres. There are seven deaneries spread across the three administrative counties and 44 parishes with a Catholic population of approximately 490,000 out of a total population of 2,017,142 (2009 Kenya National Census) in the Diocese.

The Catholic Diocese of Eldoret engages in a variety of activities which are broadly organised into Pastoral and Development. The Pastoral division deals with spiritual matters and care through administration of sacraments such as baptism, solemnizing marriages, ministering to the sick, offering counselling services, giving hope to the desperate and so on.

The Development division of the Diocese deals with the part of physical human development. It oversees people's overall well-being by addressing social, economic and development issues through various departments such as Health, Education, HIV/Aids, Agriculture and Food Security, Counselling, Water, Technical Training, Micro-finance, Justice and Peace and Youth among others.

APPENDIX II: UASIN GISHU COUNTY MAP



APPENDIX III: PARISH CLUSTERS

Deanery	Urban	Sub-urban	Rural	Total
I Eldoret Deanery (Cathedral, Majengo, Seminary)	1. Cathedral 2. Huruma 3. Kapsoya 4. Kimumu 5. Langas 6. Majengo 7. Moi University 8. Seminary		1. Burnt Forest 2. Cheptiret 3. Kaptagat 4. Matunda 5. Moiben 6. Timboroa 7. Turbo 8. Yamumbi 9. Ziwa 10. Tembelio	18
II Keiyo Deanery		1. Iten	1. Kabichei 2. Kamwosor 3. Mokwo 4. Tambach	5
III Marakwet Deanery		1. Kapcherop 2. Kapsowar	1. Arror 2. Chesoi 3. Chesongoch 4. Embobot 5. Endo 6. Nerkwo	8
IV Nandi North Deanery		1. Kapsabet	1. Cheptarit 2. Chepterit 3. Chepterwai 4. Kaiboi 5. Ndalat	6
V Nandi South Deanery		1. Nandi Hills	1. Kapkemich 2. Kipsebwo 3. Kobujoi 4. Ol'Lessos 5. Tach-Axis 6. Tindinyo	7
No. of parishes in each category	8	5	31	44

APPENDIX IV: QUESTIONNAIRE

This study is a requirement for the partial fulfilment of the Master of Philosophy Degree in Communication and Journalism at Moi University. The purpose of this study is to investigate the extent to which the use of the internet has addressed the communication needs of the Catholic Diocese of Eldoret community. It is hoped that the study will identify gaps and make important recommendations.

In this regard, I request you to answer all the questions in this questionnaire as honestly as possible and as correctly as you can by ticking appropriately or writing down your response in the blank spaces provided. The information given will be treated confidentially during and after the study.

Questionnaire No.....

SECTION A: GENERAL INFORMATION

1. Name of parish.....
2. Institution/Department/Congregation/Group:
3. Gender: Male Female
4. Age (years): Below 18 18-22 23-27 28-32 33-40 Over 40
5. Highest Education attained:
 A. Primary B. Secondary C. Tertiary D. University
 Others (specify).....
6. Occupation/Designation.....

SECTION B: COMMUNICATION NEEDS IN THE DIOCESE

1. What kind of Diocesan information/news would you want to receive most? (Indicate by number from 1 for that which you would want most)
 - (i) Information on faith
 - (ii) Reports on new and on-going programmes/projects
 - (iii) Upcoming activities/events/functions
 - (iv) Apostolic and Pastoral Statements/letters
 - (v) New appointments/other changes in the Diocese
 - (vi) Entertainment e.g sports, and festivals
 - (vii) Information on Lay Movements & Associations
 - Others (specify)
2. What kind of information would you want to send most within the Diocese?
 - i) Official communication to counterparts
 - ii) Social communication to friends
 - Others (specify).....

SECTION C: INTERNET ACCESS AND USE AMONG THE DIOCESAN COMMUNITY

1. Where do you access the internet?
 Home Workplace School/College Cybercafe Parish
 Other (Specify).....

2. What kind of internet connection do you use?
 Dial-up Broadband Wireless Satellite
 Other (Specify)

3. a. How often do you use the internet?
 Daily Weekly Bi-monthly Monthly
 Other (Specify).....

- b. Why do you use it in this manner?
 Depends on Needs Accessibility Affordability
 Other (s) (Specify).....

4. Please indicate how often you use the internet to communicate at the different levels listed below using the range of 1-3, where 1 indicates most often and 3 least often.

Level	1. Most Often	2. Often	3 . Least often
Local (within the Diocese)			
National (Other parts outside the Diocese)			
Global (Outside the country)			

5. What do/would you use the internet for within the Diocese?
 To access information
 For Entertainment (music, TV, Radio, video, etc)
 To communicate with friends within the Diocese
 For official communication with the Diocesan community
 To read online Diocesan publications
 Other (specify)

SECTION D: MEANS OF ADDRESSING COMMUNICATION NEEDS

1. What are some of the ways in which you communicate within the Diocese? (Indicate by range from 1-10 depending on most used means; 1 represents most used)
 Internet Letters Telephone calls SMS
 Publications Books Public addresses Face-to-face
 Radio Television
 Others (specify).....

2. a. Are the means of communication in 1 above efficient and adequate in your opinion?
 Yes No
 Please give reason (s) for your answer above

- b. What are some of the communication problems you have experienced within the Diocese?
 Not getting all necessary information Delays
 Incorrect information High cost
 Other(s) (specify).....

3. To what extent do you think the internet could solve some of your communication problems within the Diocese?

- i) Completely
- ii) To a great extent
- iii) To an average extent
- iv) To a little extent
- v) To no extent at all

4. What is your preference of the internet as a medium of communication in comparison to the following other means of communication within the Diocese. (Please write the number of the score in the corresponding space).

Medium	Postal letters	Telephone calls	Text messages	Face-to-face communication	Printed publications
Score					
1. Not at all					
2. Worse					
3. Equal					
4. Better					
5. Best					
Score					

SECTION E: BENEFITS AND CONSTRAINTS OF INTERNET USE LOCALLY

1. What do you think are the constraints of using the internet to communicate and access information within the Diocese? (Tick appropriately)

- Technological expertise Affordability Availability
 No interest No need Language used Irrelevant content
 Others (specify)

2. How would you rate the internet in terms of the following?

	1. Low	2. Fair	3. Good	4. High	Score
Availability	1. Low	2. Fair	3. Good	4. High	
Accessibility	1. Poor	2. Fair	3. Good	4. High	
Affordability	1. Very Expensive	2. Expensive	3. Fair	4. Cheap	
Need in the Diocese	1. Not needed	2. Little needed	3. Quite needed	4. Extremely needed	
Knowledge & expertise	1. Poor	2. Average	3. Good	4. Very good	
Interest in the medium	1. Low	2. Average	3. Good	4. High	
Convenience	1. Low	2. Fair	3. Good	4. Very good	
Efficiency	1. Low	2. Average	3. Good	4. Very good	
Speed	1. Low	2. Fair	3. Good	4. High	
Capacity	1. Low	2. Fair	3. Good	4. High	
Effectiveness	1. Poor	2. Fair	3. Good	4. High	

3. What are your suggestions regarding improving the use of the internet for communication within the Diocese to meet the communication needs of the Diocesan Community? List as many suggestions as you can.

- i)
- ii)
- iii)

4. Any other comment (s) you would wish to make regarding the use of the internet as a modern means of communication within the Diocese?

.....

APPENDIX V: LIST OF RESPONDENTS

- 1. Priests – 1**
 - 2. Catechists – 2**
 - 3. Teachers – 6**
 - 4. Health Administrators/Workers – 4**
 - 5. Youth leaders – 6**
 - 6. Heads of learning institutions – 3**
 - 7. Parish leaders – 6**
 - 8. Committee leaders – 6**
 - 9. Religious Brothers and Sisters – 6**
- Total – 40**

APPENDIX VI: RESEARCHER'S INTRODUCTION LETTER

Monica W. Ndirangu
Moi University
P.O. Box 3900-30100
Eldoret

10th November, 2010

To Research Respondents

Dear Respondent,

I am carrying out a research to investigate the extent to which the use of the internet has addressed the communication needs of the Catholic Diocese of Eldoret community. This is in partial fulfillment of the requirement for the award of the Master of Philosophy Degree in Communication and Journalism at Moi University.

This study targets members of the Catholic Diocese of Eldoret community of faithful, particularly priests, catechists, teachers, health administrators, heads of institutions, youth group leaders, parish leaders, heads of departments and committees and religious communities leaders, as respondents.

I therefore kindly request you to respond to the attached questionnaire as honestly and as accurately as possible. The information given will be treated confidentially.

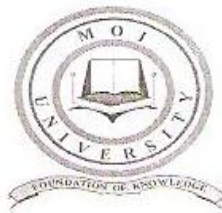
I hope that this study will provide useful information to all stakeholders for the effective use of the internet in addressing local communities' communication needs, in particular those of the Catholic Diocese of Eldoret community. I undertake to avail a copy of my findings to your Parish when completed.

Thank you for your cooperation.

Yours faithfully,



Monica W. Ndirangu
Researcher

APPENDIX VII: INSTITUTION'S INTRODUCTION LETTER

MOI UNIVERSITY
 ISO 9001:2008 Certified Institution
 OFFICE OF THE DEAN
 SCHOOL OF HUMAN RESOURCE DEVELOPMENT

P.O. Box 3900
 ELDORET, KENYA.

254-053-43153/43620 Ext.43

REF: MU/SHRD/PG/77

17th November, 2010

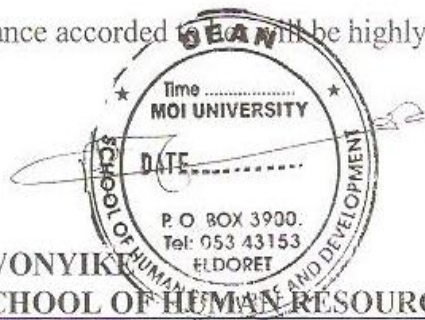
TO WHOM IT MAY CONCERN

RE: NDIRANGU MONICA WAHU – SHRD/PGJ/09/08

The above named is an M.Phil student at Moi University, School of Human Resource Development, Department of Communication Studies.

It is a requirement of her M.Phil Studies that she conducts a research and produces a Thesis. The topic of her Thesis is *Use of the Internet in Addressing Local Communities' Communication Needs in Organizations: A case of the Catholic Diocese of Eldoret.*

Any assistance accorded will be highly appreciated.



DR. J. KWONYIKI
DEAN: SCHOOL OF HUMAN RESOURCE DEVELOPMENT

APPENDIX VIII: RESEARCH AUTHORIZATION

REPUBLIC OF KENYA



NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telegrams: "SCIENCETECH", Nairobi
 Telephone: 254-020-241349, 2213102
 254-020-310571, 2213123.
 Fax: 254-020-2213215, 318245, 318249
 When replying please quote

P.O. Box 30623-00100
 NAIROBI-KENYA
 Website: www.ncst.go.ke

Our Ref:

NCST/RRRI/12/1/INF/30/5

Date:

8th December, 2010

Ndirangu Monica Wahu
 Moi University
 P. O. Box 3900
ELDORET

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *"Use of the internet in addressing local Communities' communication needs in Organizations: A case of the Catholic Diocese of Eldoret"*. I am pleased to inform you that you have been authorized to undertake research in **Uasin Gishu District** for a period ending **31st January, 2011**.

You are advised to report to **the District Commissioner and the District Education Officer, Uasin Gishu District** before embarking on the research project.

On completion of the research, you are expected to submit **one hard copy and one soft copy** of the research report/thesis to our office.


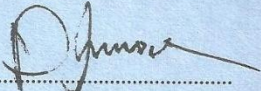
P. N. NYAKUNDI
FOR: SECRETARY/CEO

Copy to:

The District Commissioner
 Uasin Gishu District


The District Education Officer
 Uasin Gishu District

APPENDIX IX: RESEARCH PERMIT

<p>PAGE 2</p> <p>THIS IS TO CERTIFY THAT:</p> <p>Prof./Dr./Mr./Mrs./Miss..... <u>MONICA</u></p> <p>..... <u>NDIRANGU WAHU</u></p> <p>of (Address)..... <u>MOI UNIVERSITY</u></p> <p>..... <u>P.O. BOX 3900, ELDORET</u></p> <p>has been permitted to conduct research in</p> <p>..... Location,</p> <p>..... <u>UASIN GISHU</u>..... District,</p> <p>..... <u>RIFT VALLEY</u>..... Province,</p> <p>on the topic..... <u>Use of the internet in</u></p> <p>..... <u>addressing local communities'</u></p> <p>..... <u>needs in organizations: A case of</u></p> <p>..... <u>the Catholic Diocese of Eldoret.</u></p> <p>.....</p> <p>for a period ending..... <u>31ST JANUARY</u>..... <u>20</u>..... <u>11</u></p>	<p>PAGE 3</p> <p>Research Permit No...... <u>NCST/RRI/12/1/INF/30</u></p> <p>Date of issue..... <u>8/12/2010</u></p> <p>Fee received..... <u>SHS 1,000</u></p>
	
	
	<p>.....</p> <p>Applicant's Signature</p> <p>.....</p> <p>Secretary National Council for Science and Technology</p>

CONDITIONS

1. You must report to the District Commissioner and the District Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit
2. Government Officers will not be interviewed with-out prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2)/four(4) bound copies of your final report for Kenyans and non-Kenyans respectively.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice



REPUBLIC OF KENYA

RESEARCH CLEARANCE PERMIT

GPK6055t3mt10/2009

(CONDITIONS— see back page)