

**INFORMATION SHARING STRATEGY AMONG HUMAN RIGHTS  
ORGANIZATIONS-A CASE STUDY OF HURINET UGANDA**

**By**

**Elisabeth Kisakye**

**2009/HDO5/15028U**

**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE AWARD OF THE MASTER OF SCIENCE IN  
INFORMATION SCIENCE OF MAKERERE UNIVERSITY**

**July, 2014**

## APPROVAL

This research dissertation has been submitted with the approval of the following supervisors;

Dr. George William Kiyangi

**Date**

.....

**Signature**

.....

Dr. David Luyombya

**Date**

.....

**Signature**

.....

## DECLARATION

I, Elisabeth Kisakye, declare that this dissertation is my original work and to the best of my knowlwdge has not been submitted for any academic award to any institution.

Signed

Date

.....

.....

Elisabeth Kisakye

## ACKNOWLEDGEMENT

I would like to thank the Almighty God who has seen me through this course. He has provided wisdom, understanding, finances, and grace to enable me complete this course. For this i say “Ebenezer”

My gratitude is also extended to my supervisors; Dr. G.W Kiyingi and Dr. David Luyombya who not only availed time to guide me but also provided constructive criticism that helped perk up my research. I am grateful for every hour you put in to make this research better.

This research would not be complete without the support of the management, staff, and member organizations at Human Rights Network-Uganda (HURINET-U). I am so thankful for the time you availed off your busy schedules to respond to my queries on information sharing within the network. I am particularly indebted to Mr. Ndifuna Mohammed who provided enormous support in the preliminary stages of this research and to my supervisor Mr. Patrick Tumwine for letting me take hours off work to attend my classes.

I am also grateful to my family in the Lord Jesus Christ who rendered support through prayer, finances, favorable studying environment, and motivation. I am especially grateful to Dr. Abraham Muwanguzi, Mrs. Sarah Muwanguzi, Irene Mbawaki, Sylvia Munafu, and Helah Purity Kwagala. Your encouragement kept me going on in times when I should have given up.

## TABLE OF CONTENTS

ACKNOWLEDGEMENT .....	4
DECLARATION .....	3
APPROVAL .....	2
ACRONYMS AND ABBREVIATIONS .....	<b>Error! Bookmark not defined.</b>
TABLES .....	viii
ABSTRACT.....	10
<b>CHAPTER ONE: INTRODUCTION TO THE STUDY</b>	
1.0 Introduction to the study .....	1
1.1 Conceptual background .....	1
1.2 Contextual background .....	4
1.3 Statement of the problem .....	7
1.4 Purpose of the study.....	9
1.5 Specific objectives .....	9
1.6 Research questions.....	10
1.7 Scope of the study.....	10
1.8 Conceptual frame work.....	11
1.9 Significance of the study.....	12
1.10 Conclusion .....	13
<b>CHAPTER TWO: LITERATURE REVIEW</b>	
2.0 Introduction.....	14
2.1 Information sharing channels.....	14
2.2 Information sharing practices among networked organizations .....	17
2.3 Models of information exchange .....	20
2.4 The role of the feedback system in the information sharing process .....	24

2.5	Challenges to effective Information sharing for networked organizations .....	26
2.6	Strategies for improved information sharing among networked organizations .....	30
2.7	The Research Gap .....	35
2.8	Conclusion .....	35

### CHAPTER THREE: METHODOLOGY

3.0	Introduction.....	36
3.1	Research design .....	36
3.2	Study population .....	37
3.3	Sample Size and selection.....	37
3.4	Sampling Methods .....	38
3.5	Data collection methods.....	39
3.6	Data collection instruments.....	39
3.7	Pre-testing (validity and reliability) .....	42
3.8	Procedure for data Collection .....	42
3.9	Data Management and Analysis .....	42
3.10	Ethical considerations .....	43
3.11	Conclusion .....	43

### CHAPTER FOUR: PRESENTATION AND DISCUSSION OF FINDINGS

4.0	Introduction.....	45
4.1	Description of the respondents of the study.....	46
4.2	Information sharing channels in place at HURINET-U.....	46
4.3	The effect of information sharing practices on information quality in HURINET-U .....	56
4.4	The effect of feedback in the information sharing process at HURINET-U .....	63
4.5	Strategies for improved information sharing at HURINET-U.....	70
4.5	Conclusion .....	77

### CHAPTER FIVE: SUMMARY OF FINDINGS ,CONCLUSIONS, & RECOMMENDATIONS

5.0	Introduction.....	78
5.1	Summary of findings.....	78
5.2	Conclusions .....	81
5.6	Recommendations.....	82
	Reference .....	87
	APPENDICES .....	91

Appendix 1: Respondents’ questionnaire

Appendix 2: Interview guide

Appendix 3: List of HURINET-U member organizations

Appendix 4: Permission to conduct research

## FIGURES

Figure 1: Conceptual framework.....	10
Figure 2: Hub and spoke model .....	20
Figure 3: The Rim-effect information exchange model.....	21
Figure 4: Non directed information exchange model .....	22
Figure 5: Devolved secretariat model .....	23
Figure 6: Thematic categorization of HURINET-U members.....	47
Figure 7: Existence of information sharing practices .....	59

## **LIST OF ACRONYMS AND ABBREVIATIONS**

<b>ALIN</b>	Arid Lands Information Network
<b>CBO</b>	Community Based Organization
<b>CMS</b>	Content Management System
<b>CRP</b>	Civil and Political Rights
<b>CSO</b>	Civil Society Organization
<b>DVD</b>	Digital Versatile Device
<b>ESCR</b>	Economic Social and Cultural Rights
<b>HTML</b>	Hypertext Markup Language
<b>HURINET-U</b>	Human Rights Network-Uganda
<b>ICT</b>	Information and Communication Technology
<b>IM</b>	Instant Messaging
<b>MIS</b>	Management Information Systems
<b>MRC</b>	Medical Research Council
<b>NAADS</b>	National Agricultural Advisory Services
<b>NGO</b>	Non Government Organization
<b>NUSAF</b>	Northern Uganda Social Action Fund
<b>OVC</b>	Orphaned and Vulnerable Children
<b>SMS</b>	Short Message Service
<b>SPSS</b>	Statistical Package for Social Scientists
<b>TV</b>	Television
<b>UN</b>	United Nations



**WWW** World Wide Web

**XML** Extensible Markup Language

## **LIST OF TABLES**

Table 1: Number of participants per category .....	37
Table 2: Description of study respondents .....	46
Table 3: Most efficient channel of information sharing .....	50
Table 4: Verbal communication a major information sharing channel .....	54
Table 5: Emails mostly used electronic channel .....	51
Table 6: Phone calls used as main channels of sharing information.....	52
Table 7: Instant messaging as a main channel of information sharing .....	52
Table 8: Most common practice of sharing information.....	56
Table 9: Influence of practices on information confidentiality.....	57
Table 10: Information sharing practices affect the timeliness of information .....	58
Table 11: Information sharing practices and distortion of information .....	58
Table 12:Information sharing practices and unauthenticated information .....	59
Table 13: Feedback systems in place for information shared .....	61
Table 14: Delivery reports are activated on all mailing systems .....	62
Table 15: Acknowledgement of receipt through mail .....	62
Table 16:Existence of a call back system .....	63
Table 17: Feedback ensures that there is clarification on information sent.....	63
Table 18: Communication using notice boards .....	64
Table 19: Meetings used to send feedback to recipients .....	64
Table 20: Communicating back guarantees credibility of information .....	65
Table 21: Feedback ensures reliability of information .....	65
Table 22: An Information sharing strategy in place .....	68
Table 23: Secure channels need to be put in place for credible information .....	68
Table 24: Regular meetings are required for effective communication.....	69

Table 25: Alert systems need to be installed.....	70
Table 26: Security systems should be put in place.....	71
Table 27: Encryption for classified information.....	71
Table 28: Interactive web based systems need to be put in place.....	72

## **ABSTRACT**

The survival of all organizations is dependent upon creation, utilization and sharing of information. It is therefore inevitable that organizations make use an information sharing strategy which is an organization's unified blueprint for capturing, integrating, processing, delivery, and presentation of information in a clean, consistent, and timely manner.

Given the pertinent role information plays in organizations, the study sought to examine information sharing between Human Rights Network-Uganda (HURINET-U) with its stakeholders with a view of proposing a suitable strategy to foster effective information sharing for enhanced coordination. Reviewed literature highlights information sharing channels that support information sharing, information sharing practices, effect of the feedback system on the quality of information, information sharing models, and strategies for improved information sharing. The research explored the concept that the nature of information channels used, the information sharing practices, and feedback system have an effect (positive or negative) on the quality of information shared.

The study employed a cross-sectional descriptive survey design with the aim of providing an overview how information is shared in HURINET-U by observing the different forms of information handled, the channels used, and practices followed.

Key findings revealed that HURINET-U members and staff make use of numerous channels, practices, and feedback means in the information sharing process with stakeholders. It was observed that despite the enormous information sharing activities, a unified blue print in form of a strategy that stipulates how, when, and with whom information is to be shared is lacking. Information sharing is thus done in a policy vacuum.

In view of the findings from the study, it is recommended that HURINET-U designs a strategy for capturing, integrating, processing, delivery, and presentation of information in a clean, consistent, and timely manner.

## **CHAPTER ONE**

### **INTRODUCTION AND BACKGROUND TO THE STUDY**

#### **1.0 Introduction**

The study examined information sharing between Human Rights Network-Uganda (HURINET-U) with its stakeholders with a view of proposing a suitable strategy to foster effective information sharing for enhanced coordination. This chapter presents the background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, scope of the study, justification, and significance of the study.

#### **1.1 Conceptual background to the study**

A majority of workers today are knowledge workers and spend time creating, distributing, or using information (Campana, 2009). According to Geromino (2009) about 80% of an executive's time is devoted to receiving information, communicating it, and using it. NGOs in the human rights sector and other fields are increasingly involved in policy advocacy as a means to scale up their impact (Dawes, 2006). They gain leverage by communicating their ideas to policy makers and becoming sources of knowledge for them (Keck & Sikkink, 2008). NGOs' ability to create, share, communicate, and use information is critical for the effectiveness of their policy advocacy not only by strengthening their credibility and legitimacy, but also by allowing advocates to economize their resources when pursuing their goals (Boisot, 2005). The information environment of advocacy networks provides a rich setting to explore the

conditions in which the creation, sharing and use of knowledge assets contribute to the effectiveness of organizations where knowledge plays a central role in decision making and this is largely determined by the information quality traded

Information includes both electronic and physical information and organizations must be capable of managing this information throughout the information lifecycle regardless of source or format; data, paper, documents, electronic documents, video (Robertson, 2005)

There are many types of information that is shared among organizations (sectoral, numerical, and so forth) and various ways to share such information that range from formal to informal ways (Ryle, 2008). Although all modes of information-sharing are common in NGO community, there are substantial differences in the frequency and quality of information that is shared among these organization as the result of the channels used and other general information sharing practices at hand.

Information sharing is one of the most basic activities of coordination in any organization that allows flow of quality information with in and around an organization. At its most rudimentary level, it allows organizations to know about one another's activities (Dawes, 2006). At higher levels, it may enable strategic planning and enhance multi-agency efficiency and program delivery. How nongovernmental organizations (NGOs) share information in all settings, and how that information is transmitted throughout NGO agency networks, United Nations (UN) bodies, and host governments, shape and determine the quality of information within these networks and determine the quality of service delivery (Kolekofski et al, 2009). Networking encompasses a wide range of activities including information sharing and many networking organizations exist

primarily for the purpose of information sharing. Information sharing in this case is a collaborative process around central themes carried out by actively interested parties (Nelson & Farrington, 2000)

Effective information sharing requires an information system to allow easy and interactive flow of information as may be required by all stakeholders (Dawes, 2006). An information system is used to collect, process, and disseminate information and make it available for decision makers at the right time. Traditionally, an information system deals with transferable data through plain media of communication such as local area net works and the internet. The recent advance of information technology offers a rich variety of media such as video conferencing and online decision support systems that enable decision-makers to convert tacit knowledge into explicit knowledge and to share explicit knowledge (Dennis et al, 2008).

Information sharing and integration has long been recognized as a critical enabler for enhancing organizational effectiveness and efficiency. Better strategic decisions and improved problem solving can be achieved with aggregated information and knowledge (Drucker et al, 2007). Information sharing and integration can also lead to significant cost savings and data reuse without duplicated data collections (Dawes, 2006)

Whereas there are numerous benefits of information sharing, there are some problems rooted in the organizational structure of bureaucracy. Hierarchy, specialization and centralization are recognized as major sources of distortion and blockage of information quality (Tsai, 2007). Vertical hierarchical structure can be barriers to information-sharing (Creed et al, 2006). Gil-Garcia and Pardo (2005) states that the complexity of cross-

boundary information sharing gradually increases from the organizational level, the inter-organizational level, to the intergovernmental level and it is with these levels that information must be shared effectively for efficient coordination.

On the whole, information sharing entails exchanging or otherwise giving other agencies access to information (Zhang & Dawes, 2006). The delivery and management of services increasingly relies on complex networks of interdependent organizations to deal with ambitious or complex issues, because networks of organizations can solve problems that cannot be achieved, or achieved easily, by single organizations (O'Toole, 2007). A reciprocal and voluntary collaboration between two or more organizations is necessary to deliver services. With the development of information and communication technology, inter-organizational networks and external alliances have become more common, and consequently sharing and integrating information across organizations (Agranoff and McGuire, 2010). For this to be achieved, an information sharing strategy is crucial to the provision of comprehensive and continually improving services through partnership working and embracing new technologies. It is also a major factor in joint working to protect the most vulnerable and in providing accessible services across the whole population (Hansen et al, 2009). An Information sharing strategy further provides the basis for program design, resource allocation, and influences policymaking.

## **1.2 Contextual background**

Human Rights Network-Uganda (HURINET-U) is a networked human rights organization whose main goal is to advocate for, promote, and protect human rights.

HURINET-U has a membership of 43 organizations who need to share different forms of

information in the conduct of their activities. HURINET-U secretariat thus plays the important function of ensuring that information effectively flows from the secretariat and among member organizations as well to ensure effective coordination in the network. Since the inception of HURINET-U in 1993 members have pursued a collective agenda as stipulated in its constitution in regard to creating, processing and communicating on variety of human rights issues with designated channels and practices. Given the coordination role HURINET-U plays, internally processed data needs to be communicated to different stakeholders. This necessitates a streamlined information sharing process to enable sustained information credibility for effective coordination (HURINET-U, 2010). In this process, information plays a vital role and includes the following elements;

- Information about the mandate and objectives of HURINET-U
- Information about the activities of HURINET-U
- Information about HURINET-U's future plans
- Information about HURINET-U's resource base
- Information about collaborations with other organizations

HURINET-U has a mandate to fulfill, programme goals to be met, and services to deliver for the benefit of stakeholders HURINET-U Constitution (1999). If this mandate is to be achieved, reliable and quality information flow is mandatory most especially since the mandate requires a high degree of coherence and integrity in data and information creation, collection, processing, storage, and dissemination.



The above elements notwithstanding, inherent weaknesses remain in the information sharing process within the network and this affects the free flow of information. According to HURINET-U (2010) Performance Audit report, at least 15% of the information shared among partner organizations is critically incomplete either to or from those organizations, on average 19% of information is inaccurate, on average 22% of the data sent or received from partner organizations is past the deadlines and 11% of the data is inconsistent largely in figures. For effective coordination information must exhibit all the characteristics of good information, in which case the situation seems variant. The continuation of such a trend means that all qualities of good information could be overruled hence poor coordination of HURINET-U's activities leading to poor service delivery.

HURINET-U hence needs a well planned and coordinated information sharing strategy to deliver the right the information to the right audience, at the right time, and in the right form. In addition, the information needs of stakeholders are not static and thus an effective and efficient information system should be responsive to the stakeholders' changing demands. Without such a system there are loopholes created in information sharing between HURINET-U and its stakeholders. Information sharing practices thus need to be investigated to explore their impact on awareness and productivity.

### 1.3 Statement of the problem

HURINET-U largely depends on data and information to and from its internal and external environments to coordinate its activities. In its internal environment programme staff exchange information while in the external environment member organizations, donors, communities, partners, and other stakeholders channel information into HURINET-U on disparate issues including; child rights, civil and political rights, economic, social and cultural rights, peace and conflict resolution, and women rights.

HURINET-U has over time made varied but discernible efforts to ensure information sharing with her members and other key stakeholders. In 1998 HURINET-U connected to internet via dial-up system and launched its website in 2002 soon after acquiring its own server. In 2005 a resource centre was established to support in collecting, analyzing, repackaging, and disseminating information to all her stakeholders. In addition, online information sharing platforms like Google groups, human rights information data bases, and web pages were introduced as a means of providing multiple access points to stakeholder information needs.

The above efforts were pursued in keeping with HURINET-U's overarching mandate. According to the Amended Memorandum of Association of HURINET-U (5) (b), one of her main objects is:

*To promote optimum sharing of information and resources  
both human and material among Human rights organizations  
in Uganda. (Page 2)*

In her Code of Conduct launched 2010, HURINET-U has further set for herself and her members high standards in regard to information sharing and access, thus:

*We recognize and uphold that it is the right of every individual, community or people to receive objective and verifiable information presented in a precise and complete manner. (Page 11)*

The crux of the matter is that despite numerous efforts by HURINET-U to facilitate information sharing, information does not appear to be effectively flowing between HURINET-U and her stakeholders. This is a problem that has manifested itself over time. The HURINET-U Performance Audit Report (2010) revealed persistent information sharing challenges including untimely, inconsistent, distorted, and incomplete information distribution to member organizations and other stakeholders.

It was revealed in 2009 that while member organizations, and other stakeholders devote a lot of time creating and communicating information in a variety of formats, the lack of documented guidelines on how information should be shared and with whom presents great challenges (HURINET-U, 2009).

The different stakeholders have different information needs which must be satisfied. In addition, there is need for relevant, consistent, and timely information that can be used in problem solving or decision making situations. On the other hand, uninformed staff can jeopardize HURINET-U's information dissemination mandate by giving wrong information or by not being able to give any information at all. The wide range of

stakeholder groups calls for a unified information strategy in order to strengthen information sharing and enhance coordination.

It is against this background that the study was conducted to examine information sharing between HURINET-U with its stakeholders with a view of proposing a suitable strategy to foster effective information sharing for enhanced coordination.

#### **1.4 Purpose of the study**

The study sought to examine information sharing between HURINET-U and its stakeholders with a view of proposing a suitable information sharing strategy to enhance awareness and productivity.

#### **1.5 Specific objectives**

The specific objectives of the study were:

1. To identify the existing information sharing channels at HURINET-U
2. To analyze the effect of information sharing practices on service delivery at HURINET-U
3. To examine the role of information feedback system on information quality at HURINET-U
4. To identify the challenges associated with information sharing in HURINET-U
5. To propose strategies to improve information sharing between HURINET-U and its stakeholders

## **1.6 Research questions**

To achieve the above aims and objectives, the following research questions were identified to guide the study:

1. What are the existing channels of information sharing channels in place at HURINET-U?  
–Are they adequate and effective?
2. Which stakeholders share and need information from HURINET-U?
3. What are the key factors that must be considered when planning an information sharing strategy for HURINET-U?
4. What challenges does HURINET-U encounter regarding information sharing?
5. Which strategies may be appropriate to deliver information to HURINET-U stakeholder groups?

## **1.7 Scope of the study**

### **Subject scope**

The study examined the effect of information sharing strategies on information quality, service delivery, and coordination at HURINET-U. It specifically looked at information sharing channels, the effect of information sharing practices on information quality, challenges associated with information sharing, and strategies to improve information sharing in HURINET-U.

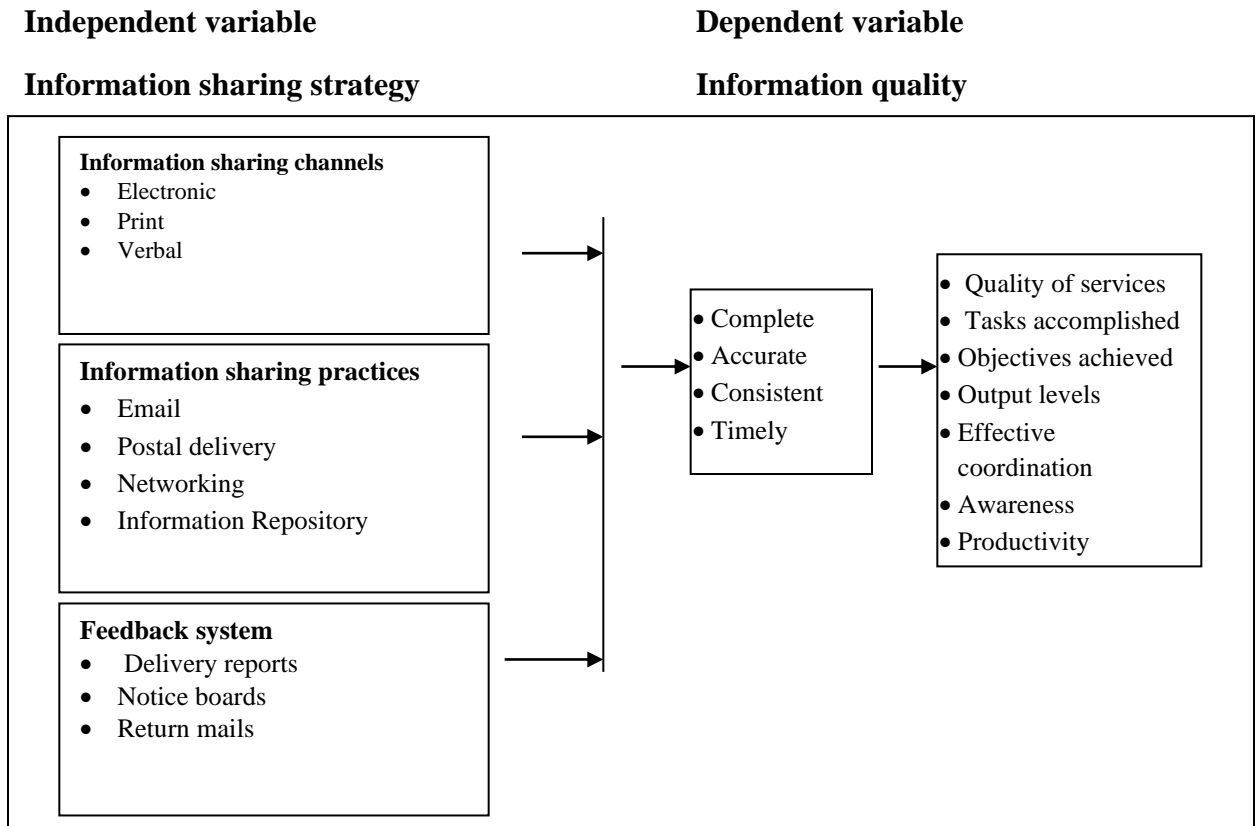
### **Geographical scope**

The study was carried out at HURINET-U main offices in Kampala and member organizations in different parts of Uganda. These offices have been selected because they

have information that is largely related to information sharing processes within and outside the organization.

## 1.8 Conceptual frame work

**Figure 1: Conceptual Framework of information sharing strategy and information Quality**



*Source: Nelson & Farrington (2000)*

In the conceptual framework, the independent variable is information sharing strategy which was looked at in regard to information sharing channels, information sharing practices and feedback systems. The dependent variable was information quality which was looked at in regard to information completeness, information accurateness, timeliness of information and its consistence. The information sharing channels used determines whether information is likely to reach in time, be accurate or complete. The information sharing practices and feedback systems determine whether information is likely to be accurate, consistent or otherwise leading to quality services, awareness, and productivity.

### **1.9 Significance of the study**

The results of this study are expected to be of value to the following:

**Information users:** The findings of the study are likely to enlighten the information users and processors of the best ways of sharing information from one point to another within the organization and partner organizations in the human rights circles.

**Human rights promoters:** The information gathered in this study could be utilized by human rights promoters to gain awareness of the major weaknesses in the process of sharing information and endeavor to suggest the way forward. This could be done basing on the recommendations that have been made and if implemented, this would help enhance the performance of human rights organizations in Uganda in promoting and protecting rights of citizens.

**Policy makers in Human Rights:** As individuals charged with formulating policies, their understanding of better ways of sharing information within the organization and

among member organizations and the role of having functioning human rights bodies remains a key task to them in order to improve the performance of human rights bodies in Uganda. Therefore, findings from this study may help them in formulation of better policies. The policy makers may review their decisions on how best they can involve necessary bodies in the struggle to improve human rights.

**Researchers:** The issues raised in this study are likely to lead to the involvement of various researchers in generating more knowledge from various perspectives. The findings of this study could form a basis for further research to those interested in finding more on information sharing organizations and how they protect and promote human rights. The study findings will further guide researchers and academics to establish the value of information sharing. The research will contribute to the scholarly field of information networking.

## **1.10 Conclusion**

The above chapter has presented the back ground to the study, statement of the problem investigated, the purpose of the study, aim and objectives of the study, research questions, and the scope of the study. The chapter has further provided a conceptual frame work highlighting both independent and dependent variables that defined the scope of the study. The last part of the chapter has presented the significance of the study to different categories of people.

Chapter 2 will present literature on information sharing channels, practices, challenges, models, and the need to have strategies for enhanced information sharing.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This chapter presents the review of literature according to the objectives of the study focusing on information sharing channels, information sharing practices, information sharing strategies and how they affect information quality as well as feedback systems and their effects on information quality.

#### **2.1 Information sharing channels**

Information sharing channels are the way through which information flows within the organization and with other organizations. Information in an organization may flow forward, backwards, and sideways (Pearson and Saunders, 2009).

According to Krauss and Morsella (2000), information can be shared through two different channels namely; formal and informal channels. They assert that formal information sharing channels transmit information such as the goals, policies, and procedures of an organization and messages follow a chain of command. An organization's newsletter giving stakeholders a clear idea of the organization's goals and mission is cited as a good example of a formal channel of information sharing.

Informal information sharing on the other hand is established around the societal affiliations of members of an organization and is spread through grapevine. Grape vine is an informal person-to-person means of circulating information or gossip (Quellet, 2003)

Kolekofski and Heminger (2009) grouped information sharing channels into traditional and modern channels. The traditional channels include verbal communication which is in most cases done through meetings. Modern information sharing channels on the other hand are mainly guided by Information Communication Technology (ICT).

As a channel of information sharing verbal communication is vital in organizational information sharing among members. However this largely depends on interpersonal relationship within and around the organization. Therefore in information sharing interpersonal relationship is an important aspect. Kolekofski and Heminger (2009) assert that interpersonal relationships influence attitudes and intentions to share information that may influence the quality of such information. Informal relationships, such as personal networks and team work that are not arranged and defined by hierarchy and regulation, can result in more intense and effective information sharing between departments in an organization. Wheatley (2006) also explains that information can grow from social networks where exchange is common and information is not accumulated only by individuals but shared with others.

Verbal means of information sharing involves communication with different stakeholders in the information sharing process and this can be executed in teams or otherwise. Because teams are custom-built for each opportunity, each engagement involves collaborating with different sets of stakeholders, and within a project, different subgroups of members are engaged over time (Madden, 2008). This enables efficient flow of information hence the quality of information.

Modern channels of information sharing involve the adoption and use of various channels like email and other electronic means especially in handling information from multiple sources. Recently, tools have been developed to address the problem of managing multiple channels of information. In relation to various information sharing channels Moran, et al, (2005) suggested that emails help organizing information and activities around tasks instead of tools and artifacts. Laqua, et al (2009) proposed an email plug-in that aggregates relevant information from diverse corporate sources. Aizenbud-Reshef, et al (2009) tackled the problem of information overload by proposing a feed aggregator with collaborative features allowing workers to share feeds and divide reading tasks. In the consumer domain, web tools such as Friend Feed and Google Reader, feeds from various web-based sources in a single location have also been proposed. However, busy workers need more than reverse-chronological lists. While these tools support the aggregation of information, they do not support easy slice and dice functions to filter, monitor, and organize the various information streams.

According to Gregorio (2010) the main channels that are used for information sharing in professional terms involve email, telephone, and local folders on computers. Emails and telephones are key communication means, used primarily to coordinate meetings and exchange information within the organization and among partner organizations. Most employees in organizations utilize emails several times in an hour so as to access the information from different sources. According to a study by Gregorio (2010) in the information sharing process most companies indicated daily phone use, through the cell phones (100%) and office lines (67%). They also used less frequently, though

significantly, other tools such as Instant Messaging -IM (daily 62 %) and collaboration tools such as wikis and a content management system (CMS). Overall, their level of technology adoption far surpassed averages for networked workers in the US (Whittaker and Sidner, 2006).

Pertaining to tools for managing and sharing information, the use of multiple channels is evident in most organizations. Information and documents are fragmented across numerous tools (email, file system, phone, document editors, calendar, IM/SMS, databases, CMS, Wikis). A key source of strain is managing document versions across remote and local archives, email, and other repositories (McDonald and Ackerman, 2007). Thus, this general situation points to the need for better cross-channel information management, and such a tool would need to be flexible in order to accommodate the constantly changing set of technologies used by the teams. In most organizations email is the most the central tool for managing and exchanging information, transferring documents, and coordinating; as such, it is critical that any new system either incorporates email or at least offloads some information normally transmitted via email (Moran et al, 2005). Reliance on idiosyncratic foldering patterns is common for managing information, suggesting that flexible foldering options for organizing documents should be supported.

## **2.2 Information sharing practices among networked organizations**

The existence of information sharing practices in an organization that range from formal to informal and from manual to automated practices enables easy information flow among members. This is very essential as it provides the mechanism for coordination and

integration of the processes or activities (Lee, 2009; Ramayah and Omar, 2010). To ensure that stakeholders' requirements in the management process are fulfilled, it is fundamental to manage the information flow to the final users within and around the organization. An interactive view of information enables people to define the level of information they need to solve problems or make decisions (Singh, 2006). Depending on the decisions, some people can use data to answer the questions, but others need to extract information from the same data to solve their problems. This interactive view also enables people to trace the source of knowledge from the available data, or to specify the required data based on their explicit knowledge.

Networking is another common information sharing practice currently recommended for NGOs to improve information quality, performance and enhance impact to the service users. Since many NGOs are small and dispersed, networking is commonly seen as a cost-effective means to share information and spread knowledge about grassroots' needs, solutions and best practices (Sonnenwald and Pierce, 2006). In addition, networking is believed to strengthen NGO's ability to speak with one voice and to significantly increase their impact as policy negotiators and advocating agencies.

Networks tend to be created to fill gaps in available information systems and often in opposition to established interests and institutions. In essence, a network is a communication device and a mechanism that links people or organizations that share some common value and or objective (Haythornthwaite and Wellman, 2008) within and around the organization. One fundamental advantage of networks is that they allow organizations to confront growing challenges without having to enlarge their formal

structure. Individual weakness may be overcome inherent to the network's member institutions (Meyer, 2007). Networking, thus, assures us that small can still be beautiful. By working together on prioritized issues, by learning from each-other and by utilizing each-others' skills and resources, NGOs can gain flexibility, strength and efficiency. This, however, requires equal status among members of a network.

Information sharing practices in most organizations are influenced by the mode in which they are observed. If the enablers and constraints to the creation and sharing of knowledge differ from one information environment to another, it is necessary to identify particular frame of sharing information. As suggested by Davenport and Prusak (2007) there are different enablers that constrain information sharing practices and these are; knowledge workers; knowledge politics; knowledge culture; organizational knowledge strategy and knowledge assets architecture.

In information sharing knowledge workers are people who handle (collect, analyze, synthesize and communicate) the organization's information. This common in organizations that are advocacy based. Advocacy is a knowledge intensive activity and the management of knowledge is, therefore, not exclusive to few but done by most staff within advocacy networks. Workers' skills in handling information and knowledge are vital for the creation and sharing of knowledge assets and for the overall effectiveness of advocacy process. In the organization there is knowledge or information politics. In knowledge politics the power and governance structures of information management and use (Davenport and Prusak, 2007) remain of great importance in ensuring the quality of

information in an organization. The way power is distributed within NGOs affects how they create and share information and knowledge (Carlsson and Wohlgemuth, 2009).

Information sharing practices are largely affected by information culture within an organization. The collective set of norms and roles formal and informal that have evolved historically, and that regulate the way in which individuals or groups within an organization create, share and use information and knowledge determine how much and what quality of information is likely to be shared in the organization. Also the Organizational knowledge strategies have an effect on the quality of information in an organization (Boisot, 2008). Conscious organizational attempts to possess and apply knowledge assets embedded in objects, documents, and within the heads of the organization's members in order to enhance organizational performance through economizing the consumption of organizational resources.

### **2.3 Models of information exchange**

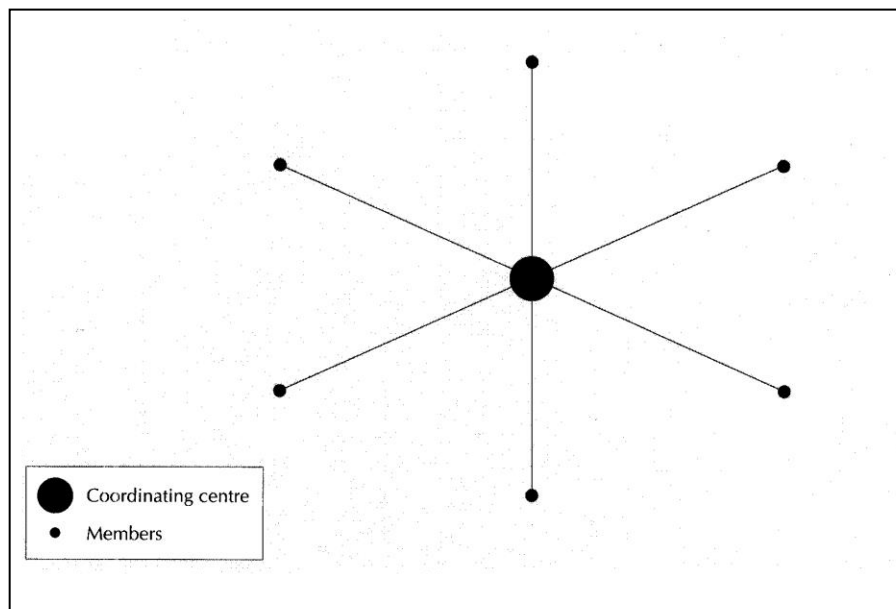
Nelson and Farrington (2000) coined four models of information sharing for networked organizations which are quite relevant to this study. These include; the hub-and-spoke model, the rim-effect model, the non-directed or decentralized model, and the devolved secretariat model. These models are highlighted below;

#### **The hub-and-spoke model**

This model focuses on facilitating the exchange of experiences between members so as to increase efficiency by allowing ideas that have succeeded in one location to be tried elsewhere and by discouraging the replication of those that have failed. This model envisages a coordinating centre which consults network members on the themes of

information sharing activities to be pursued within the network and other strategic issues. The hub is ultimately responsible for policy on such as network membership. In addition, the hub compiles a register of members including their thematic and geographical interests and encourages network members to send in reports on their experiences which are kept in a special library or research centre. The role of the research centre is to facilitate research on themes of interest to network members by providing professional and, occasionally financial support to those willing to document their experiences. The coordinator aims at bringing these experiences to the attention of policy makers by publishing synthesis within the network and elsewhere.

**Figure 2: Hub and spoke information exchange model**



*Source: Nelson and Farrington (2000)*

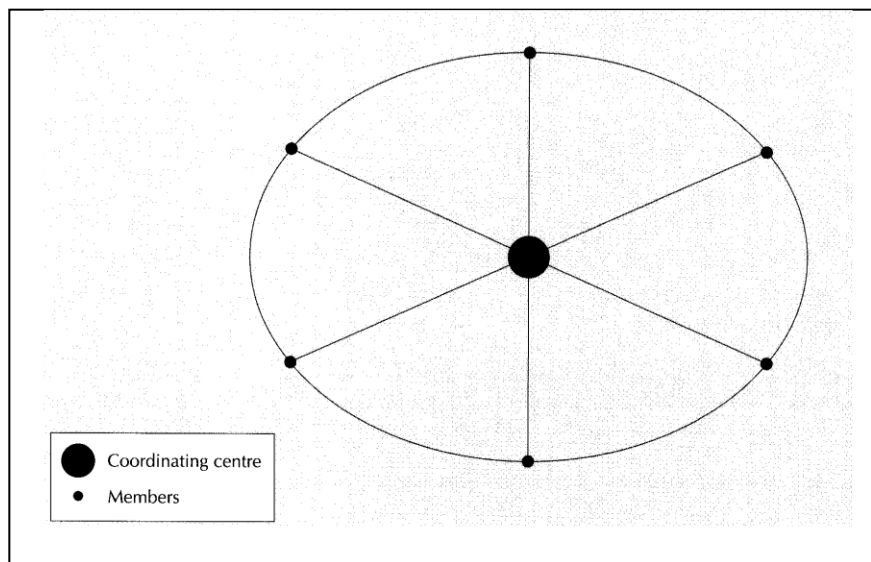
### **The Rim-effect information exchange model**

In this model there is far less dependence on the centre or coordinating agency. Strong emphasis is placed on providing individual members with opportunity to establish their



own links with other network members. This model fosters members' skills and knowledge in a practical way. Information sharing is carried out through active collaboration. The Arid Lands Information Network (ALIN) managed by OXFAM follow this kind of model. ALIN works to encourage increased contact and information sharing amongst its widely dispersed membership through the publication of a network newsletter, conducting exchange visits, and dissemination other publications. ALIN emphasizes the importance of personal contact between the members themselves and between the network coordinators and members. The coordinating office provides a low level of support to members for activities such as exchange visits and regional meetings. The formation of local member groups is encouraged.

**Figure 3: The Rim-effect information exchange model**



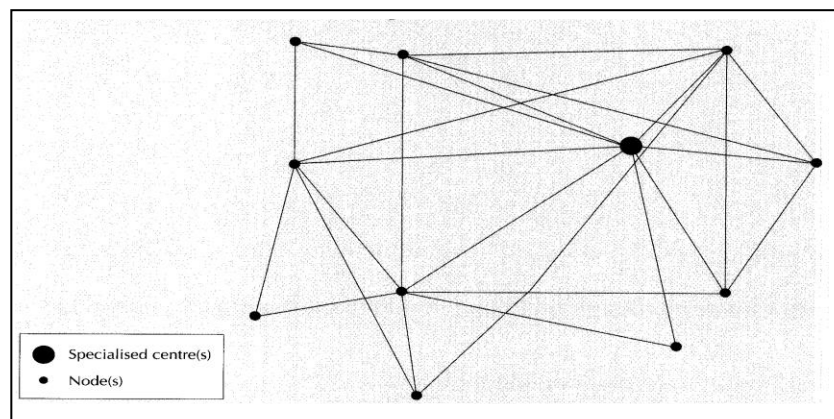
*Source: Nelson and Farrington (2000)*

### **The non-directed or decentralized information exchange model**

In this model members actively and regularly communicate amongst themselves, and derive support only through the motor of association. Participants know who is doing

what, the resources of each member and how to reach them. The role of the coordinating centre in this model is intended to diminish as the network develops, and close knit or dense sub-networks are formed. This implies that a large portion of the members know each other independently of the centre. The network structure only helps the process by identifying those who share common interests and so might form networks of their own and by facilitating common work to respond to their shared objectives.

**Figure 4: The non-directed or decentralized information exchange model**

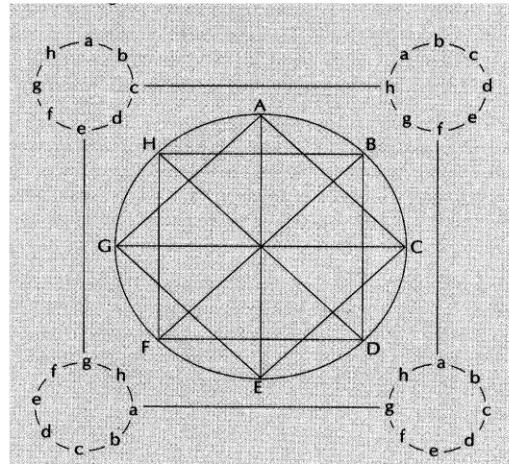


*Source: Nelson and Farrington (2000)*

### **The devolved secretariat model**

This model envisages a network model which is coordinated through a secretariat with devolved responsibilities. It ensures that the formation of a secretariat does not lead to a centralization of power and ideas but rather provides for flexibility of operation and a more manageable information exchange process.

**Figure 5: The devolved secretariat model**



*Source: Nelson and Farrington (2000)*

#### **2.4 The role of the feedback system in the information sharing process**

In the information sharing process, the data sharing component of the system addresses the feedback requirements of the different stakeholders. However, feedback should also be encouraged to help identify inadequacies or weaknesses in the data collection and sharing system which can then be addressed immediately and monitored. Effron (2004) suggest that the results of information gathering programmes should always be feedback to those involved in the data collection activities providing opportunities to discuss and revise any short comings, inaccuracies and inconsistencies of information and data, which otherwise would become untrustworthy.

Partnerships are complex approaches to organizing work, because they involve blending different missions, cultures, work styles, deadlines and time pressures, financial concerns,

and expertise (Provan, 2003). In some cases, such as the relationships between organizations, the area of overlap are minimal, while in others, such as between organizations is substantial. In another situation another organization conducts a significant portion of its work with multi organizations, and would need sophisticated communication systems to manage information flow and coordination with its partners. Complexity increases at the individual organizational level and at the system level, based on the number of partners. With the complexity of these types of inter organizational relationships, strategic and effective communication becomes important. Feedback is a form of communication that provides information as well as a strategy for building trust and strengthening relationships (Sullivan and Decker, 2007). The problem of seeking and using feedback is essentially one of managing information flow in order to work effectively and, probably even more importantly, to build relationships that can lead to vision and leadership in improving the service delivery. Information may flow in one direction only or back and forth between organizations. Effective partnerships build mechanisms both for mutual information sharing and for ensuring that feedback is used to improve program effectiveness.

According to (Provan, 2003) giving and receiving feedback is time consuming and, therefore, costly. Members of partner organizations may consciously choose to use feedback as a strategic asset or may resist feedback believing that its costs outweigh the benefits. Feedback may be actively sought or it may be passively accepted. Both the frequency and regularity of feedback have the potential to influence the

relationship between the partners, with more regular and frequent feedback leading to more reliable information flow and enhanced inter organizational trust.

Using feedback reduces organizational decision-making autonomy (Provan, 2004) and creates challenges, because organizations pressed for resources may not immediately see the benefits. Lack of resources, including adequate finances and staffing, is the primary challenge many organizations identify in the development of a proactive and interactive feedback process. Together, partners should determine the goals of feedback and devise cost-effective methods of assessing whether the goals have been met.

## **2.5 Challenges to Effective Information sharing for networked Organizations**

The major barriers to information sharing highlighted by O'Brien (1999) are related to information accuracy, usability, and timeliness. O'Brien notes that the accuracy of the information is the most important and that the information an organisation provides to its clients must be precisely accurate in order to make vital decisions. Where one piece of data is incorrect it would mean poor decision making and loss of vital opportunities.

Constraints related to usability arise where organisations use software to access information. In many cases information may not be easy-to-use and perhaps not understandable for the end-user as well as the executives. The information ought to be easily accessible from the hardware where it is stored. Additionally, if the information is generated into a report form, that the report must be made in such a way that it can be interpreted effortlessly in order to make precise decisions (Weerakody, 2005)

The third most significant challenge discussed by O'Brien (1999) is concerned with the time factor. Due to the fact that time and operations of information users progresses at a fast rate, information too needs to be received at a faster rate. Organizations could lose out on many opportunities if personnel do not get the information in time to make prompt decisions.

Notwithstanding challenges related to accuracy, usability, and time, organisational infrastructures in place may not provide for an adequate platform for systems integration and this restricts the sharing of resources and information. Halonen (2004) observes that though organisation staff may have internal databases with a wide range of information types, these databases and systems processing the information may be all dispersed within different departments and clients have to contact these departments to access different services.

The development of information systems that support information sharing also present an essential issue of organizational change. Information systems according to Halonen (2004) often lead to changes in the work processes and structures of personnel. Organisations and information systems are closely related due to the growing interdependence between business strategy, rules, and procedures and information systems, software, hardware, databases, and telecommunications (Laudon, 2003). A change in any of these components often necessitates changes in other components.

The role of culture in the development of information sharing initiatives should not be underestimated. Handy (1999) notes that organisations have deep-set beliefs about the way authority should be exercised, and the ways in which people should be controlled.

Organisations may also resist the new information sharing initiatives because they differ from their assumptions and requirements (Furton, 2003).

Besides organisational environment and culture, the failure of information sharing initiatives to meet the user requirements is a daunting challenge to their implementation in organisations. Halonen (2004) explains that the needs of the users and stakeholders are often difficult to define and they change over time. Users and information system developers typically belong to different organisational units with different objectives and values. In many cases users are not or cannot be actively involved in developing or testing new information systems (Gefen and Ridings, 2003). The scholars found that users' acceptance of the system increased when the users believed that they shared values with the system developers.

Panteli and Sockalingam (2005) highlight that constraints to Information sharing implementation may derive from organisational, relationship, and process conflicts. The authors add that such conflicts reduce open communication and information sharing. With these conflicts in place (Effron, 2004) notes that there is no incentive to share information because people are busy with their tasks even without the need to write their knowledge in any database. Lack of knowledge hinders the problem-solving process at the beginning when clarification and description of the problem are important (Mumford, 2003).

Benamati & Lederer (2000) link information sharing constraints to information technology changes and warn that mistakes in implementing new information technology can be costly yet managers cannot be experts on all emerging technologies. This is

coupled with training demands, long learning curves, and difficulty retaining staff experienced in new information technology.

Brown (2004) argues that the information sharing challenges organizations face are linked to competition pressure. He asserts that while NGOs are non profit entities, they have been increasingly forced to compete over limited available resources and “market share” leading to a type of “corporatization” of NGOs. Brown adds that although NGOs voice the desire and willingness to corporatize, the pressure of competition is enormous, presenting challenges to joint communication and information sharing. There is a general reluctance of NGOs to share information especially information that is considered proprietary or of significant value to organizations typically competing for funding from the same sources (Sonnenwald, 2006).

The major challenges associated with information sharing in human rights organizations according to Cifuentes and Dueck (2006) are linked to the management of both digital and physical information. Valuable information is kept on paper documents, in physical archives, that are vulnerable to threats like arson or confiscation. A match and some kerosene may be enough to destroy ten years of work. Digital documents on the other hand are usually kept on the computers of individuals, and not centralized into a common repository (server). This makes sharing and collaboration difficult, and means that different versions of the same document will often be stored on multiple computers, which is confusing and inefficient.



## **2.6 Strategies for improved information sharing among networked organizations**

An underlying element to the successful information sharing process in organizations is developing trusted relationships among the members and the organizations' staffs. Several of the organizations have professional and administrative staffs that provide analytical capabilities and facilitate their members' participation in the organization's activities. Trust is critical to overcome members' reluctance to disclose their weaknesses, vulnerabilities, and other confidential or proprietary business information to other members some of whom are business competitors (Zhang and Dawes, 2006). In many situations members are reluctant to share information due to concerns that an inadvertent release of classified information may damage reputations; lower service users confidence; provide an advantage to competitors; and possibly negatively affect members' businesses and lead to punitive measures against an individual member or a member organization.

Organizations should use a variety of mechanisms to ensure effective and timely communication among members in the information sharing process and this can be achieved through the professional and administrative staffs that some of the organizations have established (Singh, 2006). In addition, most organizations are always concerned about appropriately securing the information being shared to maintain member anonymity, when desired, and avoid inappropriately disseminating sensitive or proprietary information to nonmembers.

To ensure proper and efficient information sharing, regular scheduled meetings among member organizations are the primary method for sharing information as well as a method for building trust among other stakeholders (Zhang and Dawes, 2006). These meetings offer a generally secure environment to share information, while also encouraging broader member participation. The organizations adjust the meeting times and lengths to accommodate member needs and attempted to enhance the meeting's efficiency and effectiveness by limiting the time for presentations, approving most topics and presentations before the meetings, and adjusting meeting times to maximize face-to-face discussions between members (Sonnenwald and Pierce, 2006).

Various ICT provides important communication mechanisms as well. For example, Web sites are used to disseminate all types of information, including alerts, advisories, reports, and other analysis, make databases available to the members; and provide methods for members to ask each other about particular incidents, vulnerabilities, or potential solutions (Medical Research Council, 2004). Organizations may endeavor to put in place secure Web sites to share sensitive information and others may use open sites to share general information with their members and the public. In addition, some organizations may use e-mail to communicate less sensitive information to the entire membership. However, members from one organization do not

typically use e-mail because of the lack of security and the inability to control subsequent distribution (Moran et al, 2005). Some organizations rely primarily on regular mail and telephone conversations to disseminate information about most things, including meeting agendas and real-time problem solving.

Numerous approaches are available to partners interested in stimulating helpful and growth-producing feedback, including: Advisory committee meetings; participation in community-wide consortia or coordinating committees, inclusion of consumers on advisory committees or consortia; sharing information related to referrals; development of shared protocols and guidelines; informal information exchange between individuals within partnering organizations, communication media such as shared newsletters, Web pages, and electronic discussion groups; and shared programs, programs or grant funding for demonstration programs (Thompson, 2007).

Advisory committees and consortia provide formal mechanisms for seeking feedback on a regular and frequent basis. Sharing leadership of such groups and developing shared meeting agendas give participants equal opportunities for input. Well-organized advisory committee meetings that occur on a regular basis provide a mechanism for strengthening relationships between partners, fostering reliable information flow about community needs and assets, and making ongoing improvements in meeting community health needs (Moran et al, 2005).

Annual evaluations of committee members and satisfaction with their level of participation in decision making may be positive on evaluation. The development and distribution of communication tools, such as newsletters, Web pages, electronic discussion groups, is yet another strategy for fostering dialogue between partners (Whittaker and Sidner, 2006).

To use feedback effectively for continuous program improvement, organizational capacities must be developed for responding to feedback in real time and solving process problems interfering with feedback. In order to achieve real time responsiveness, feedback mechanisms must be well established and known to all. Communication opportunities should be reliable and predictable. Key players must diligently attend to maintaining avenues of communication (Sebastian et al, 2008). One effective strategy is to incorporate an on-going development program for program participants.

Participants need a strong sense of trust so they are free to explore ideas and feelings. Trust develops through consistent and full disclosure of relevant information, as well as through demonstrations of support and respect involved in the feedback process. Qualities of helpful feedback include candor, a focus on issues and problem solving rather than on personalities, and respect for differing points of view. Conflict and differences must be managed so they become positive features of the communication feedback loop. If disagreements lead to antagonism or suspicions, they can quickly derail the feedback process, as well as the partnership

itself. An additional key to developing trust among organizational partners is providing clear evidence that the strengths of each partner are valued and incorporated into the work of the partnership (Gelmon, 2009).

It is vital to have shared understanding of mission, goals, & policies in the feedback process. Continuous improvement focuses heavily on streamlining processes. Inter organizational feedback itself can have process problems related to communication. Participants must understand all policies, procedures, and performance expectations. Failure to include and value input from all partners interferes with the development and maintenance of trust. Mutual involvement in long range planning, shared agendas, and timely distribution of minutes facilitate communication and feedback. Program leaders should be vigilant in recognizing and responding quickly to issues (Thompson, 2007).

In order to ensure improved information sharing there is great need for evaluation of feedback efficacy. Because of the quality and quantity of resources that must be dedicated to the feedback process, evaluating its effectiveness and correcting deficiencies are critical to the development of efficient partnerships. Evaluation procedures should include mechanisms for strengthening and improving feedback if the process is not meeting the desired goals. Feedback is a key component of continuous quality improvement; program leaders should use this strategy to maximize the benefits of quality improvement information from multiple perspectives (Provan, 2004)

Regular feedback that is actively sought is an important strategy for optimizing partnerships. Collaborating organizations should aim at including all stakeholders in the feedback process, including service users, policy makers, and their own organizational members. Multiple and diverse approaches to seeking and using feedback should be developed, and the effectiveness of these approaches should be assessed and improved upon on a regular basis (Sebastian et al 2008). All partners should seek to understand and implement policies and procedural expectations. If modifications are needed, participants should be flexible and consider overall outcomes. In evaluating the effectiveness of feedback, partners might ask whether their input is actively sought on a frequent basis; if input is used to make program improvements; and whether the ongoing benefits of engaging in joint decision making outweigh the costs. Program leadership must remain dedicated to the process, providing the framework and continuous support necessary for successful feedback.

## **2.7 The Research Gap**

From the literature reviewed it becomes apparent that many alternative strategies for information sharing exist and the approach will vary depending on the context of activities and the long term goals of the organization's information exchange programme. This chapter has reviewed some of the models, practices, and channels that support information exchange. However, the proposed information exchange models do not highlight the importance of clear goals to be set for information exchange in human rights

organizations to achieve set objectives. Thus this study sought to bridge that gap by proposing appropriate information sharing strategies for Human Rights Network-Uganda with different stakeholders.

## **2.8 Conclusion**

This chapter was a presentation of the relevant literature reviewed according to the objectives of the study. It has affirmed to the fact that many information sharing channels, practices, and strategies exist and has identified the need to set clear goals concerning information sharing. Chapter 3 will present the methodology which was followed to conduct the research.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.0 Introduction**

The chapter presents the methodology that was used to carry out the study. It presents the research design, study population, sample size, sampling methods, data collection methods and instruments, pretesting of instruments, procedure for data collection validity and reliability, data management and analysis, measurement of variables, ethical considerations and limitations of the study.

#### **3.1 Research design**

The study utilized the cross-sectional descriptive survey design which involved both qualitative and quantitative approaches. Cross sectional descriptive survey design is the selection of a relatively small amount of data from a bigger population to act as inference. Surveys are designed to provide a snapshot of how things are at a specific time. In survey research, independent and dependent variables were used to define the scope of study (Nachmias, 1981). This supported the study objectives owing to the fact that the independent variable (information sharing strategy) focused on indicators like information sharing practices, channels, and feedback mechanisms and how these influence the dependent variable (information quality). In this study, survey methodology helped in measuring variables and examining relationships among variables as



recommended by Fowler (1993). Cross sectional survey design was adopted because it helped the researcher gather data from a sample of a wider population at a particular time and used such data to make inference about the wider population.

### **Area of the study**

The study was carried out in Kampala district at HURINET-U secretariat in Ntinda and its member organizations in Kampala district.

## **3.2 Study population**

The total study population was 159 respondents including; HURINET-U secretariat management and operational staff, member organizations' management and focal persons. They were derived from staff and member organizations lists obtained from HURINET-U (As indicated in Appendix 3). As indicated in (Table 1) below they largely involved managers, information systems personnel, and focal persons. These people were selected because they are information reach cases as far as information sharing is concerned.

## **3.3 Sample Size and selection.**

According to Mugenda and Mugenda (2003), it is impossible to study the whole targeted population and therefore the researcher has to decide on a sampled population. The sample size of the study was 139 as presented below in the table and was determined using Israel (1992) adopted from Yamane 1967 simplified formula as shown below.

$$n = \frac{N}{1 + N(e)^2}$$

n=sample size

N= population

e=level of precision (0.05)

**Table 1: Number of participants per category**

Category	Population	Sample size	Sampling strategy
<b>Top management-HURINET</b>	5	5	Purposive sampling
<b>Top management member organizations</b>	43	39	Simple random sampling
<b>Employees of HURINET-Uganda</b>	25	24	Simple random sampling
<b>Focal persons from member organizations</b>	86	71	Simple random sampling
<b>Total respondents</b>	<b>159</b>	<b>139</b>	

### 3.4 Sampling Methods

The study used purposive sampling method to select top management in both HURINET and member organizations. Purposive sampling is described as a random selection of sampling units within the segment of the population with the most information on the characteristic of interest (Guarte and Barrios, 2006).

Simple random sampling was used to select staff members at HURINET and in member staff organizations. Simple random sampling is a probability form of sampling that is

done to ensure that bias is avoided in selection of respondents (Mugenda and Mugenda, 2003). A list of employees at HURINET and its member organizations were sought from the Human Resource Department to help in determining the respondents.

### **3.5 Data collection methods**

The study utilized both qualitative and quantitative data collection methods. Primary data was obtained using questionnaires as well as interviews. Document review was done to collect secondary data from manuals, reports, guidelines, strategic work plans, and other organizational literature relevant to the study.

### **3.6 Data collection instruments**

Data collection instruments included questionnaires, interview guide and the document review checklist.

#### **3.6.1 Questionnaires**

The study used structured and unstructured questionnaires with closed and open ended items. According to (Ritchie and Lewis, 2008), closed-ended questions are used to obtain quantitative data and provide a list of possible alternatives from which respondents select the answer that best describes their views. Open-ended questions on the other hand, contain questions framed in such a way that they elicit both facts and opinions from the respondent (Yin, 2009).

The study used a five-likert scale questionnaire which was administered to HURINET-U secretariat and member organization staff. The advantage of the five Likert scale is that it does not force respondents to take a stand on a particular topic but allows them to respond in a degree of agreement (Dawes, 2008). The study had one set of questionnaire that was constructed strategically to capture all the necessary information from all categories of respondents in respect to the themes of the study in each respective objective. The questionnaire was administered door to door since most of the respondents in this category were known.

### **3.6.2 Interview guide**

An interview guide is a list of topics, themes or areas to be covered in a semi-structured interview. The interview guide has the advantage of allowing flexibility and fluidity in the topics and areas that are being covered and the way they are approached with each interviewee and their sequence (Lewis, etal, 2004).

Face to face interviews with the help of an interview guide were conducted among the top managers at HURINET and partner organizations. Interviews were conducted, since they are appropriate in providing in-depth data, data required to meet specific objectives, allows clarity in questioning and quite flexible compared to questionnaires.

### **3.6.3 Document review checklist**

The study carried out reviews of existing documents including HURINET-U strategic plan, reports, meeting minutes, and materials by other scholars in relation to information sharing among networked organizations. This helped in obtaining secondary data relevant

to the study. Secondary data for this study is understood from the standpoint of Aroa (1980) to mean “*those data which have already been gathered by some agency i.e. any person, government, research organizations, enterprises*”

### **3.7 Pre-testing (validity and reliability)**

The data collection tools were pretested on a smaller number of respondents from each category of the population to ensure that the questions will be accurate and clear in line with each objective of the study thus ensuring validity and reliability.

### **3.7.1 Validity**

Validity is the accuracy and meaningfulness of inferences, which are based on research results. It is the degree to which results obtained from the analysis of the data actually represents the phenomenon under study. Therefore validity looks at how accurately represented are the variables of the study (Mugenda and Mugenda 2003). The study adopted content validity which is the degree to which data collected using particular instruments represents a specific domain of indicators or content of a particular concept. To ensure content validity of instruments the researcher constructed the instruments with all the items that measure variables of the study. The researcher also consulted the supervisor for proper guidance after which the researcher pre-tested the instruments during a pilot study. After pre-testing ambiguous questions were removed and polished so as to remain with the finest data required. This process helped improve the original research instruments.

### **3.7.2 Reliability**

According to Mugenda and Mugenda (2003), Reliability refers to the measure of the degree to which research instruments yields consistent results after repeated trials. In testing the reliability of instruments, the study adopted cronbach alpha co efficiency reliability test where when a co-efficiency is 0.6 and above the reliability of instruments is considered reliable (Mugenda and Mugenda, 2003).

### **3.8 Procedure for data Collection**

The researcher obtained a letter of introduction from the College of Computing and Information Technology of Makerere University to help with introductions to various respondents. After the construction of instruments the researcher took them for approval to the supervisor and there after they were taken for pretesting to a few selected respondents. The researcher carried out a pilot run on a participating group in the study. Pretesting was done by selecting 15 respondents from the study and giving them the same approved questionnaires. Pretesting helped to know whether respondents interpreted phrases and questions as the researcher wanted them, it also helped to obtain a general assessment of respondents' ability to perform required tasks (e.g. recall relevant information, estimate frequency of specific behaviors, etc.) and it also helped to obtain ideas for question wording in case rephrasing of the original statements was required.

### **3.9 Data Management and Analysis**

In the study, the instruments that were used yielded both qualitative and quantitative data. After respondents answered questionnaires and interviews, raw data was cleaned, sorted and condensed into systematically comparable data. Data analysis was done using the Statistical Package for Social Scientists (SPSS), which helped to summarize the coded data and produce the required statistics in the study.

### **3.10 Ethical considerations**

The researcher put the following into consideration while conducting the research to ensure that the study is ethically conducted;

- The researcher sought the informed consent of HURINET-U staff and member organizations before conducting a study involving them. This was supported with a letter of permission to conduct the study from Makerere University School of Graduate studies and a consent form to be filled by the respondents
- The researcher further clarified the details of the study, its objectives, significance and how the respondents' views were to be used after the study
- The researcher was as objective as possible to avoid personal biases and opinions to get in the way of the research by giving all sides fair consideration
- When reporting results, the researcher ensured that what was observed and told is accurately presented. Interview responses were not taken out of context and parts of observations were not discussed without putting them into the appropriate context.

### **3.11 Conclusion**

The above chapter has described the research methodology used in conducting the research and highlighted the use of the cross sectional descriptive survey design to provide a snap shot on how information is shared in HURINET-U by observing the different channels and practices followed.



Chapter 4 will attempt to present and discuss the findings obtained during the study using the methods underscored in the above chapter.

## **CHAPTER FOUR**

### **PRESENTATION AND DISCUSSION OF FINDINGS**

#### **4.0 Introduction**

The study sought to examine information sharing at HURINET-U with focus on information sharing strategies employed. The study particularly examined the channels of information sharing used by HURINET-U, information sharing practices, the challenges encountered in the information sharing process, and strategies that can be adopted to improve information sharing in HURINET-U. The study first presents qualitative results from interviews, which are presented in narrative statements and quotations as per respondents' views in regard to each objective of the study and then results from the questionnaire which are presented in form of frequencies and percentages.

#### **4.1 Description of the respondents of the study**

Out of 139 respondents that were expected to be involved in the study 115 actually participated with 86 participating in answering structured questionnaires and 29 respondents participating in in-depth interviews that largely fetched qualitative data in form of expressions as well as narrative statements and 24 were non responses who were either not found on sight or had other excuses for non attendance. As indicated in chapter three the respondents included; HURINET-U employees and member organizations

management and operational staff. The table below illustrates the respondents' categories.

**Table 2: Description of study respondents**

<b>Respondents' category</b>	<b>Number of respondents</b>	<b>Percentage of response</b>
<b>HURINET-U top management</b>	5	4%
<b>Member organizations management</b>	34	24%
<b>HURINET-U operational staff</b>	20	14%
<b>Member organizations' focal staff</b>	56	40%
<b>Non responses</b>	24	18%
<b>TOTAL</b>	139	100%

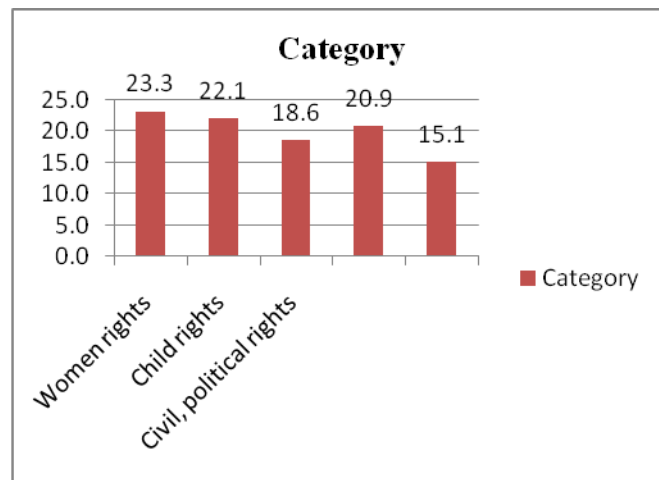
## **4.2 Information sharing channels in place at HURINET-U**

The study sought to examine the information sharing channels used in sharing information by HURINET-U. Respondents were subjected to interviews and questionnaires and responses in the two sets of tools were obtained in both qualitative and quantitative forms. Presented below are qualitative results from interviews and quantitative results obtained from the questionnaire.

### **4.2.1 Channels of information sharing used by different thematic categories at HURINET**

It was revealed that HURINET-U member organizations focus on different thematic areas and are engaged in a wide range of activities which require information exchange using either informal or formal means. The findings below highlight the thematic categories of HURINET-U member organizations, the kind of information they process and the channels they use to share it with stakeholders.

**Figure 5: Thematic categorization of HURINET-U member organizations**



### **Channels used by women’s rights organizations**

The HURINET-U women rights cluster revealed to be involved in activities including; research, advocacy, capacity building, community mobilization against gender based violence and conducting trainings on women rights. The organization uses both formal and informal means of information sharing within the network. Formally information is shared using quarterly and annual reports and for some organizations monthly newsletters as well. Information pertaining to advocacy campaigns like that against gender based violence is exchanged through more formal means like policy briefs in newspapers and press releases. It is also worth noting that electronic channels like emails, list serves, and documentaries are often used as vehicles for information to stakeholders. Most of the

respondents attested to the HURINET-U Google groups which are available online to facilitate information sharing among the members.

One of the respondent revealed during an interview that they use multiple channels of information sharing as they go about their work.

*“...we largely address women’s’ rights and we mostly look at advocacy on women’s rights issues, community mobilization on gender based violence, and capacity building using both the new and traditional means of information sharing .”*

### **Information sharing channels used by Child rights organizations**

When asked to reveal the different activities child rights organizations conduct, they listed the following; conducting education and sponsorship programmes for vulnerable child, conducting school development programs, offering legal support to abused children, conducting social-economic security programs, offering psychological support to victims, economic empowerment for orphans and vulnerable children, vocational training, conducting early childhood development and nutrition programs, conducting Child protection programmes, and advocating for child labor prevention and rehabilitation

The respondents further revealed that the above listed activities involve intense information processing and sharing within and outside their organizations. Numerous information sharing channels were found to be used depending on the nature of the activity. For instance capacity building activities like vocational training for children utilize training manuals, and trainings as the fundamental means of information sharing with stakeholders. Service delivery activities like child protection and psychological

support employ less formal means like community meetings to facilitate information sharing.

### **Information sharing channels used by Civil and political rights organizations**

The civil and political rights cluster was found to be more focused on advocacy and lobbying initiatives which require multiple channels of information exchange. Respondents during interviews asserted that civil political rights is perhaps the most information intense thematic area and requires appropriate channels to deliver messages effectively. Channels used largely depend on the message and the recipients of the same. In conducting policy advocacy, respondents revealed using dialogues with stakeholders and baseline survey reports as major means of information exchange. Networking through coalitions was also found to be a major means of information sharing by the respondents

Some of the outstanding activities performed by organizations with a civil and political rights niche include; capacity building for human rights defenders, human rights protection and promotion, policy advocacy, offering legal and paralegal services to victims, community trainings on human rights, civic education on human rights issues, monitoring government programmes, programmes on the elimination of all forms of torture, democracy and good governance campaigns, and human rights violations documentation

### **Information sharing channels used by Economic, Social and cultural rights (ESCR) organizations**

Organizations focusing on economic, social and cultural rights were found to be using more formal means than informal in their information sharing process. This is attributed to the nature of audience they address including Government, diplomatic missions, civil society heads, and donor agencies. These organizations for instance draft shadow reports on the status of human rights in Uganda and present them to the UN human rights body. They further monitor the human rights situation in Uganda and make recommendations in form of Policy briefs, press releases, and documentaries.

Activities including; trainings on human rights based approaches, health education, basic education and livelihoods skills development, sustainable livelihoods skills development, and research on the status of economic, social, and cultural rights in Uganda were reported by respondents to generate a wide range of information products including training manuals, research reports, human rights status reports, and others which are exchanged with stakeholders.

### **Information exchange channels used by Peace and conflict resolution organizations**

HURINET-U member organizations focusing on peace and conflict resolution indicated high dependence on dialogues with stakeholders, meetings, training manuals, and research reports. They share information processed from conducting activities including; peace training and education, human rights monitoring and documentation, functional adult literacy and support, life skills development and trainings, research on post conflict peace- building, and advocacy on peace and conflict resolution issues, and, good governance and human rights promotion campaigns.

From the findings above it is apparent that the thematic categorization of the activities conducted determine the channel of information used. It was also revealed that a lot of channels are used in sharing of information among member organizations largely depend on organizational capacities and interests for the information shared. In most situations a mixture of channels are used depending on the purpose and objective of the information shared. One of the respondents explained that

*“.....in our organization, we use various channels to share information with partner human rights organizations and this largely depends on the purpose and urgency of the information needed, when it is urgent we use electronic channels, when its instant we use verbal ways and print when it requires so.....however we largely use electronic channels.....”*

From the above expression, the channel used to share information used largely depends on the purpose and objectives for which the information is being shared. Also the urgency of the information shared determines the channel to be used in sharing the information. It was explained that when the information to be shared is urgent organizations use electronic means, since it is fast and efficient. In a situation when it is instant verbal ways of information sharing are adopted and this largely happens in meetings, workshops and other gatherings when all stakeholders are present. Print channels are largely used when information to be shared is required in print; this largely applies to advocacy materials like brochures, posters, flyers, among others. Most organizations in the network use electronic channels to share their information with



member organizations. This is largely because it's an efficient and effective way of creating, sharing and storing information.

From the above findings it is apparent that the different thematic categories at HURINET-U conduct a wide range of activities which generate information. The different activities require proper channels of information flow. In line with this Kolekofski et al, (2009) explained that nongovernmental organizations (NGOs) share information generated from different activities in all settings, and how that information is transmitted throughout NGO agency networks, United Nations (UN) bodies, and host governments, shape and determine the quality of information within these networks and determine the quality of service delivery.

#### 4.2.2 Most efficient channel of information sharing

**Table 3: Most efficient channel of information sharing**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Print</b>	18	20.9
<b>Electronic (via email, blogs, website)</b>	23	26.7
<b>None printed (soft)</b>	16	18.6
<b>Visual</b>	15	17.4
<b>Audio</b>	14	16.3
<b>Total</b>	<b>86</b>	<b>100.0</b>

The most efficient information sharing channels were examined and from the findings demonstrated in table 3, it was revealed by 26.7% their information is shared majorly by

electronic means and largely via email, websites and blogs. It was also revealed that information is distributed using print channels (20.9%) that range from printed reports to catalogued materials in resource centers and 18.6% reported that they use soft ways to share their information. In the study (17.4%) revealed that they use visual channels as (16.3%) say they use audio channels to share their information.

#### 4.2.3 Channel commonly used in information sharing

Table 4: Verbal communication a major information sharing channel

Response	Frequency	Percentage
Strongly disagree	8	9.3
disagree	19	22.1
Not sure	2	2.3
Agree	16	18.6
Strongly agree	41	47.7
<b>Total</b>	<b>86</b>	<b>100.0</b>

It can discerned from table 4 above that verbal communication is among the main channels of information sharing within the organization as 47.7% of respondents strongly agreed to this and 18.6% agreed to the statement. In the study however 22.1% disagreed 9.3% strongly disagreed and 2.3% of respondents were not sure. From the majority verbal communication is among the major channels of information sharing and this sometimes take formal ways or non formal ways.

The above analysis is supported by Madden (2008) who asserts that verbal communication is among the main channels of information sharing within the organization since its able to deliver information in it is first hand format. Madden (2008) explains that verbal means of information sharing involves communication with different

stakeholders in the information sharing process and this can be executed in teams or otherwise. Because teams are custom-built for each opportunity, each engagement involves collaborating with different sets of stakeholders, and within a project, different subgroups of members are engaged over time. This enables efficient flow of information hence the quality of information.

**Table 5: Emails mostly used electronic channel**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Strongly disagree</b>	15	17.4
<b>disagree</b>	12	14.0
<b>Not sure</b>	1	1.2
<b>Agree</b>	16	18.6
<b>Strongly agree</b>	42	48.8
<b>Total</b>	<b>86</b>	<b>100.0</b>

As indicated in table 5 above, respondents revealed that emails are the commonly used channels of information sharing among member organizations. This was strongly agreed by (48.8%) of respondents that participated in the study, while (18.6%) agreed, (17.4%) strongly disagreed, (14%) disagreed and (1.2%) of respondents were not sure. From the majority electronic channels in form of emails are commonly used in sharing information since they are swift and effective in delivery of information as per the purpose and objective of the institution.

It can be deduced from table 3 that electronic channels mainly emails are commonly used as the main channels of information sharing among member organizations. This is attributed to the fact that they are swift and effective in delivery of information as per the

purpose and objective of the institution. According to Gregorio (2010) the main channels that are used in the information sharing in a large number of organizations in professional terms involve email, phone, and local folders on computers.

**Table 6: Phone calls used as main channels of sharing information**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Strongly disagree</b>	15	17.4
<b>disagree</b>	18	20.9
<b>Not sure</b>	1	1.2
<b>Agree</b>	14	16.3
<b>Strongly agree</b>	38	44.2
<b>Total</b>	<b>86</b>	<b>100.0</b>

Table 6 above reveals that (44.2%) of the respondents strongly agreed that phone calls are the main channels of information sharing within and outside the organization and (16.3%) agreed to this while (1.2%) were not sure. 20.9% of respondents disagreed to the fact that phone calls are the major channels of information sharing within and outside the organization.

As indicated in Table 6, it was strongly agreed that phone calls are the main channels of information sharing within the organization and outside the organization. According to Gregorio (2010) phones are key communications means, used primarily to coordinate meetings and exchange information within the organization and among partner organizations.

**Table 7: Instant messaging main channel of information sharing**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Strongly disagree</b>	43	50.0
<b>disagree</b>	10	11.6
<b>Not sure</b>	2	2.3
<b>Agree</b>	14	16.3
<b>Strongly agree</b>	17	19.8
<b>Total</b>	<b>86</b>	<b>100.0</b>

As indicated in table 7, (50%) of the respondents strongly disagreed that instant messaging through social network and network discussion groups are the main channels of information sharing among HURINET-U member organizations. 11.6% disagreed to this while 19.8% agreed that instant messaging is among the key channels of information sharing within the organization

### **4.3 The effect of information sharing practices on information quality in HURINET-U**

The study sought to examine the effect of information sharing practices on information quality within each respective organization. Information sharing practices such as mail practices within and out of the organization, postal delivery practices, networking practices, and information repository practices by the different stakeholders. Respondents were involved in answering a questionnaire and interviews. Results from interviews are presented first below.

Through interviews respondents were asked of whether there is an agreed or a common practice of sharing information within their organizations. In the findings, it was revealed that at least each organization has a common practice of sharing their information, though such way is always determined by the organization’s information sharing culture. In

justification for the existence of an information sharing practice one of the respondents explained that

*“.....we have a way of sharing our information within and outside the organization, and everyone within the organization is used to such practice but this is not stipulated by any policy or strategy.....”*

The above opinion confirms the fact that organizations have common practices of sharing their information within and outside each organization. This helps ease information flow within and outside organization. It is worth noting though that all this happens in a policy vacuum with no guidelines to facilitate the process.

Respondents were asked to specify some of the information sharing practices followed in exchanging information with stakeholders and many were cited as one of the respondents explained that

*“.....in our organization it is common practice that information must be shared using email and we commonly use outlook...this is largely for internal communication, however when we are sending information out we use our web mails.....”*

From the above expression HURINET-U stakeholders have a common practice of sharing information internally and externally in form of mail in a local area intranet and emails to partner organizations. In another response it was explained that a combination of practices are used in the information sharing process. In fact one of the respondents explained that

*“.....it is common practice for us to use post office and emails, our postal box is very active, at least every day we receive mails and we also send postal mails regularly .....”*

From the finding above it was revealed that information sharing practices are followed in more than one way. According to the respondent above, it was revealed that in their organization information must be shared either using emails or postal deliveries. In postal deliveries it was explained that information shared by postal office is largely that which must presented in hard copies such as financial related information, advocacy material among others. This helps to keep the credibility and reliability of such information shared.

Through interviews respondents were asked of how information sharing practices followed may affect information quality and from the findings, it was revealed that the mode in which information is shared may affect the credibility and privacy of information. For example information shared by postal office is likely to be opened while on the way and this may affect the confidentiality and credibility of such information. One of the respondents explained that

*“.....we have always had issues related to late delivery of postal mails and tempered with mails thereby affecting the confidentiality and purpose to which such documents are meant for.....”*

As explained above some information sharing practices delay the delivery of information which sometimes leads to non achievement of the purpose intended.

It was also revealed that information sent in the electronic practices especially email, sometimes does not reach in a way it was sent. Due to various coding systems and other interferences like viruses in the system sometimes the format or content of such information is altered. This renders it particularly less useful to the recipients.

*“.....mails sent online have always been susceptible to viruses that change the properties of such documents and content changes, this has always happened to information containing charts and figures.....”*

From the expression above external factors are likely to affect the noble qualities of information thus ineffective service delivery.

Respondents were subjected to questionnaires and their responses captured and results are presented below in charts and tables below.

**Figure 6: Existence of information sharing practices**

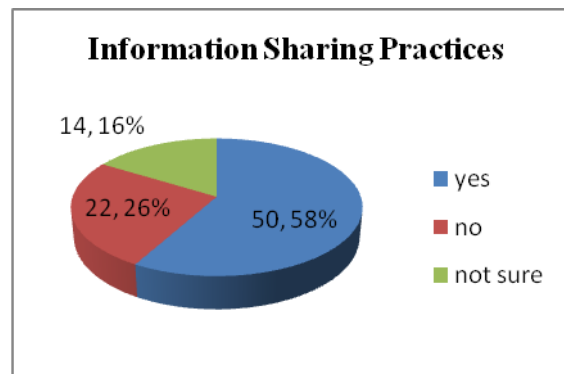


Figure 6 above reveals that a majority (58%) of respondents asserted that there are information sharing practices in place. Though (16%) of respondents say there are no information sharing practices followed, and (26%) were not sure.



**Table 8: Most common practice of sharing information**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Reports</b>	19	22.1
<b>Annual general meetings</b>	2	2.3
<b>Network forums</b>	12	14.0
<b>Emails</b>	25	29.1
<b>Workshops</b>	18	20.9
<b>Human rights week</b>	10	11.6
<b>Total</b>	<b>86</b>	<b>100.0</b>

The findings from (29.1%) responses showed that much of the information is shared through emails in soft forms. It was also revealed that information is shared through reports (22.1%) which are regularly generated and shared among the organization network. Another common practice of sharing information in the organization is through workshops (20.9%) which are regularly conducted to address various issues. Network forums (14%) are also commonly used as platforms for information sharing as well as the international human rights week which is an annual norm in the human rights arena.

**Table 9: Information sharing practices influence the confidentiality of information shared**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Strongly disagree</b>	11	12.8
<b>disagree</b>	7	8.1
<b>Not sure</b>	4	4.7
<b>Agree</b>	20	23.3
<b>Strongly agree</b>	44	51.2
<b>Total</b>	<b>86</b>	<b>100.0</b>

From the findings of the study shown in table 9, it was revealed that information sharing practices used in the organization influence the confidentiality of the information shared,

this is based on 51.2% of respondents who strongly agreed to the statement and 23.3% who agreed to the statement. However 12.8% strongly disagreed and 8.1% disagreed as 4.7% were not sure. In a situation where original format or nature of information is tampered with, information sent may lose its qualities in form of completeness or consistence, this may affect the decision making process in one or another and this may affect the performance of the institution.

**Table 10: Effect of information sharing practices on information timeliness**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Strongly disagree</b>	19	22.1
<b>disagree</b>	16	18.6
<b>Not sure</b>	2	2.3
<b>Agree</b>	34	39.5
<b>Strongly agree</b>	15	17.4
<b>Total</b>	<b>86</b>	<b>100.0</b>

Table 10 shows that (39.5%) of the respondents agree that information sharing practices used affect the timeliness (delays and deliveries) of information as (17.4%) strongly agreed, and (2.3%) were not sure. However, (22.1%) of respondents strongly disagreed to the statement and (18.6%) disagreed. The delays caused by some information sharing practices especially, postal deliveries affect the decision making process and the overall performance of the organization in the long run.

**Table 11: Information sharing practices used may cause distortion in the information**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
-----------------	------------------	-------------------

<b>Strongly disagree</b>	16	18.6
<b>disagree</b>	10	11.6
<b>Not sure</b>	3	3.5
<b>Agree</b>	39	45.3
<b>Strongly agree</b>	18	20.9
<b>Total</b>	<b>86</b>	<b>100.0</b>

As indicated in table 11, it was agreed by (45.3%) that information sharing practices used may cause distortion in the information shared and (20.9%) of respondents strongly agreed to the statement as (3.5%) were not sure. 18.6% strongly disagreed to statement while (11.6%) agreed to the statement. In a situation where information is attacked by viruses on mails, information may change thereby causing distortion in the originality of the information.

**Table 12: Information sharing practices used may lead to spread of un authenticated information**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Strongly disagree</b>	16	18.6
<b>disagree</b>	10	11.6
<b>Not sure</b>	3	3.4
<b>Agree</b>	41	47.7
<b>Strongly agree</b>	16	18.6
<b>Total</b>	<b>86</b>	<b>100.0</b>

As indicated in table 12 above, it was agreed (47.7%) that some information sharing practices used lead to spread of un authenticated information and this was strongly agreed by 18.6%. However 18.6% strongly disagreed to the statement and 11.6% disagreed to the statement. In a situation where information is shared verbally, distortions are likely to

occur in the information originality and this may affect the way certain decisions are supposed to be made in an organization.

From the findings, it can be deduced that at least each organization has common practices of sharing their information, though such way is always in favor of other organizations in way information is stored and retrieved for each organization. This confirms the fact that organizations have common practices of sharing their information within and outside the organization. This helps easy and effective information flow within and outside organization so as to pave way for proper information quality. Singh (2006) explains that it is fundamental to manage the information flow to the final users with in and around the organization with viable practices of information sharing. An interactive view of information enables people to define the level of information they need to solve problems or make decisions.

#### **4.4 The effect of feedback in the information sharing process at HURINET-U**

Feedback was looked at in regard to delivery reports, acknowledgement of receipt mails, and the use of notice boards. In the study respondents were subjected to interviews and questionnaires to obtain qualitative and quantitative data and first results from interviews.

Through interviews, respondents were asked whether there are any feedback systems in place and revealed that, there are no feedback systems in place but organizations have a way of responding to the information communicated.

*“.....we don't have a feedback system in place per say to, but we have various ways to verify whether information sent reached the destination....sometimes we call back, but most of the time, it has been a common norm for the recipients to write back confirming receipt of the document sent.....”* explained one of the respondents

From the expression above, some organizations do not have a feedback system in place specifically to handle feedback processes, but have a way of ensuring that they communicate to their information recipients on information sent. It was explained that in some situations senders call back to ascertain whether the information was actually delivered. In other cases it is the responsibility of the recipient to write back confirming receipt of the information sent. This helps to confirm the status into which information was received, hence effectiveness in decision making.

Respondents including top managers and operational staff were further interviewed on how the feedback system affects information quality. It was revealed that a feedback system in place usually determines whether information remains of the same quality at receipt as it was at the time of sending. One of the respondents explained that

*“.....having an information sharing feedback aspect in place is very important because it helps us to know whether information was received as it was sent and whether it serves the purpose to which it was meant to.....”*

It was further explained that feedback allows a complete communication process that paves way for effective decision making in the organization. When information is received as it was sent, in its completeness, accurateness and timeliness there by

maintaining the key qualities of good information, it allows the receiver to use such information as per the intended objectives. This leads to improved performance through effective coordination as the result of good information. Results from the interview were supplemented by results from the questionnaire and results are presented below

**Table 13: Feedback systems in place for information shared**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Yes</b>	35	40.7
<b>No</b>	31	36.0
<b>Not sure</b>	20	23.3
<b>Total</b>	<b>86</b>	<b>100.0</b>

Table 13 shows that (40.7%) of the respondents confirm that an information feedback mechanism is in place. However (36%) of respondents revealed that they don't have any feedback system in place.

**Table 14: Delivery reports are activated on all mailing systems**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Strongly disagree</b>	25	29.1
<b>disagree</b>	11	12.8
<b>Not sure</b>	4	4.7
<b>Agree</b>	16	18.6
<b>Strongly agree</b>	30	34.9
<b>Total</b>	<b>86</b>	<b>100.0</b>

As indicated in table 14, respondents strongly agreed with (34.9%) responses that in ensuring feedback, delivery reports are activated on all mailing systems as (18.6%) agreed to the statement. However (29.1%) of respondents strongly disagreed that delivery

reports are not there and activated on their mail while (12.8%) disagreed. Despite the activation of mail delivery reports, some time recipients of information do not ascertain reception of such information as this may affect the way certain things are to be done in the institution.

**Table 15: Acknowledgement of receipt through mail**

<b>Response</b>	<b>frequency</b>	<b>percentage</b>
<b>Strongly disagree</b>	11	12.8
<b>disagree</b>	9	10.5
<b>Not sure</b>	2	2.3
<b>Agree</b>	34	39.5
<b>Strongly agree</b>	30	34.9
<b>Total</b>	86	100.0

In reference to table 15 above, (34.9%) of the respondents strongly agreed that whoever receives a mail must reply with an acknowledgement of receipt mail and copied to different persons in the management structure, (39.5%) agreed to the statement as (2.3%) of the respondents were not sure of the existence of such. However (12.8%) of respondents strongly disagreed while (10.5%) disagreed to the statement that through mail practices they reply with an acknowledgement of receipt mail.

**Table 16: There is a call back to confirm receipt of information sent**

<b>Response</b>	<b>frequency</b>	<b>percentage</b>
<b>Strongly disagree</b>	24	27.9
<b>disagree</b>	15	17.4
<b>Not sure</b>	5	5.8
<b>Agree</b>	22	25.6
<b>Strongly agree</b>	20	23.3
<b>Total</b>	86	100.0

Table 16 shows that (25.6%) agreed that officers in charge must call back to confirm receipt of information sent and (23.3%) of respondents strongly agreed to the statement while (5.8%) were not sure. 27.9% strongly disagreed and (17.4%) disagreed that in postal delivery practices the officer in charge must call back to confirm receipt of information sent. Calling back helps to confirm first hand that information was received and this allows effective coordination in the organization.

**Table 17: Feedback ensures that there is clarification on information sent**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Strongly disagree</b>	22	25.6
<b>disagree</b>	14	16.3
<b>Not sure</b>	4	4.7
<b>Agree</b>	16	18.6
<b>Strongly agree</b>	30	34.9
<b>Total</b>	<b>86</b>	<b>100.0</b>

As indicated in table 17, it was strongly agreed (34.9%) that feedback ensures that there is clarification on information sent as (18.6%) agreed to the statement while (4.7%) were not sure. It was also strongly disagreed (25.6%) and disagreed (16.3%) that feedback ensures that there is clarification on information sent.

**Table 18: Communication using notice boards**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Strongly disagree</b>	19	22.1
<b>disagree</b>	16	18.6
<b>Not sure</b>	5	5.8
<b>Agree</b>	14	16.3
<b>Strongly agree</b>	32	37.2
<b>Total</b>	<b>86</b>	<b>100.0</b>



The findings shown in table 18 reveal that (37.2%) of the respondents strongly agreed that departments usually communicate feedback using notice boards. 16.3% agreed to the statement while (5.8%) were not sure. It was disagreed (22.1%) that responses between departments are usually communicated across using notice board. Notice boards are an effective way of communicating feedback to all member of the organization for proper or effective decision making process.

One of the respondents revealed that notice boards are very effective in sending feedback within the organization. She stated; *“through notice boards we have a sense of what is going on in the organization and are not clueless, we also get updates on what we need to do ....”*

Notice boards are thus vital in not only displaying information but also eliciting the required action or response to the information delivered through them. When stakeholders read the notices, they will pass on the information so that everyone knows what they need to do or find out if they have to do it urgently.

**Table 19: Meetings used to send feedback to recipients**

<b>Response</b>	<b>frequency</b>	<b>percentage</b>
<b>Strongly disagree</b>	20	23.3
<b>disagree</b>	17	19.8
<b>Not sure</b>	4	4.7
<b>Agree</b>	16	18.6
<b>Strongly agree</b>	29	33.7
<b>Total</b>	<b>86</b>	<b>100.0</b>

In reference to table 19 above (33.7%) strongly agreed that meetings are always convened at the HURINET-U secretariat as well as at member organizations to effect feedback to any situations. This was agreed by (18.6%) while (4.7%) were not sure. In the study, it was strongly agreed (23.3%) and disagreed (18.6%) that meetings are always convened within as well as at partner organizations to effect feedback to any situations

**Table 20: Communicating back guarantees credibility of information**

<b>Response</b>	<b>frequency</b>	<b>percentage</b>
<b>Strongly disagree</b>	22	25.6
<b>disagree</b>	16	18.6
<b>Not sure</b>	6	7.0
<b>Agree</b>	11	12.8
<b>Strongly agree</b>	31	36.0
<b>Total</b>	<b>86</b>	<b>100.0</b>

It can be discerned from Table 20 that a majority (36%) strongly agreed that communicating back guarantees credibility of information sharing process. (12.8%) agreed to the statement while (7%) were not sure. However, 25% of respondents strongly disagreed to the statement whereas (18.6%) agreed to the statement.

**Table 21: Feedback ensures reliability of information**

<b>Response</b>	<b>Frequency</b>	<b>percentage</b>
<b>Strongly disagree</b>	20	23.3
<b>disagree</b>	18	20.9
<b>Not sure</b>	2	2.3
<b>Agree</b>	10	11.6
<b>Strongly agree</b>	36	41.9
<b>Total</b>	<b>86</b>	<b>100.0</b>

Table 21 findings reveal that feedback ensures reliability of information as (41.9%) of respondents strongly agreed, (11.6%) agreed while (2.3%) were not sure. However, (23.3%) of respondents strongly disagreed, and 20.9% disagreed that feedback ensures reliability of information. This confirms that indeed information sent is received in the way it was supposed to be for effective coordination and decision making.

#### **4.5 Strategies for improved information sharing at HURINET-U**

The study sought to establish some strategies that can be used to improve information sharing in HURINET-U with different stakeholders. Data was obtained from interviews questionnaires and results are presented below.

Respondents indicated that there was an information sharing strategy in place. Singh (2006) explains that existence of an information sharing strategy implies that quality information is shared among members hence improved performance of individual members. However this is only in practice but not organized into an organizational blueprint to integrate the information sharing activities.

During interviews, respondents revealed there are many ways in which information sharing can be improved to enhance coordination in HURINET-U. One of the respondents explained that

*“....there is need to put in place proper internal backup and information handling mechanisms that allows proper storage, retrieval and dissemination....”*

A well built backup system and organized internal information sharing system in place allows information to be shared with the rightful people in the network. This allows

quality information, for improved performance in the institution. Effron (2004) explains that various types of information technology provide important communication mechanisms as well. For example, data bases and web sites are used to store and disseminate all types of information, including alerts, advisories, reports, and other analysis, make databases available to the members; and provide methods for members to ask each other about particular incidents, vulnerabilities, or potential solutions.

There is need to embrace the importance and usefulness of the social media, in the information sharing process, in fact one of the respondent argued that

*“..... It should be mandatory for all member organizations to join social network groups like Goggle chart, face book, twitter..... One would not need to call to inquire about anything.....”*

This implies that if all members are on a social network, members would find it a little bit easier to share instant information within the network. This would ease share information at any time hence improved performance of employees and their respective organizations.

Other suggestions were made through interviews on how best information sharing can be improved and these are listed below;

- HURINET-U member organizations should make frequent use of internet services like web sites and Google discussion groups to share information
- Building the capacity of member organizations should be done through training on information management

- The secretariat should equip members with techniques to document and share their work to give them wide visibility
- There should be improved flow of information between secretariat staff and member organizations
- Resource centers should be equipped with information materials in local languages to meet the needs of the people who cannot read English especially community members.
- Resource centers should be equipped with TVs and DVDs where they can show clients educative materials on human rights
- Raising awareness on the existence of resource centers should be conducted for the communities so that they can access and make use of them
- The use of training materials, tools, and manuals in both soft and hard copy; use of multiple media to document and share information
- All information shared with members should also be posted on the HURINET-U website as a central point of reference online
- Thematic cluster information sharing should be enhanced with regular cluster meetings
- Enough gadgets to support information production, storage, and sharing in all forms should be planned and budgeted for
- Cloud storage should be adopted where information is maintained, managed, and backed up remotely on multiple servers and made available to users over a network (typically the internet)
- Information needs assessment for each department should be done to ascertain information needs before acquiring information resources. This will help meet departmental information needs

**Table 22: An information sharing strategy in place**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Yes</b>	39	45.3
<b>No</b>	31	36.0
<b>Not sure</b>	16	18.6
<b>Total</b>	<b>86</b>	<b>100.0</b>

Respondents were asked whether there was an information sharing strategy in place and table 22 reveals that they were affirmative (45.3%) while (36%) of respondents said there was no information sharing strategy in place, (18.6%) were not sure. The existence of an information sharing strategy could imply that quality information is shared among members hence improved performance of individual members. It was however noted that some respondents mistake practices or norms in which information is shared for a strategy. Many organizations operate in a policy vacuum without clear standards set to guide the information sharing process.

**Table 23: Secure channels need to be put in place for credible information**

<b>Response</b>	<b>frequency</b>	<b>percentage</b>
<b>Strongly disagree</b>	12	14.0
<b>disagree</b>	15	17.4
<b>Not sure</b>	3	3.5
<b>Agree</b>	25	29.1
<b>Strongly agree</b>	31	36.0
<b>Total</b>	<b>86</b>	<b>100.0</b>

It was revealed as indicated in Table 23 that secure channels need to be put in place for credible information sharing process by (36%) respondents strongly agreeing. (29.1%) of respondents agree to this, though (3.5%) of respondents were not sure. In addition,

(17.4%) disagree while (14%) strongly disagree to the statement. Secure channels which have high security defined features allows safety of information from any intruders hence maintained quality information for effective decision making.

**Table 24: Regular meetings are required for effective communication**

<b>Response</b>	<b>frequency</b>	<b>percentage</b>
<b>Strongly disagree</b>	9	10.5
<b>disagree</b>	14	16.3
<b>Not sure</b>	6	7.0
<b>Agree</b>	23	26.7
<b>Strongly agree</b>	34	39.5
<b>Total</b>	<b>86</b>	<b>100.0</b>

As indicated in Table 24 it was revealed by (39.5%) responses that there is need for regular scheduled meetings for effective communication. 26.7% agreed to the statement while 7% were not sure. However, (16.5%) of respondents strongly disagreed whereas (16.3%) disagreed to the statement. Having regular meetings with key persons in the organization to allow effective discussions and feedback allow free flow of information hence improved overall performance.

Having regular meetings with key persons in the organization to allow effective discussions and feedback enable free flow of information hence improved overall performance. Sonnenwald and Pierce (2006) explain that to ensure proper and efficient information sharing, regular scheduled meetings among member organizations are the primary method for sharing information as well as a method for building trust among other stakeholders. These meetings offer a

generally secure environment to share information, while also encouraging broader member participation. The organizations adjusts the meeting times and lengths to accommodate member needs and attempted to enhance the meeting's efficiency and effectiveness by limiting the time for presentations, approving most topics and presentations before the meetings, and adjusting meeting times to maximize face-to-face discussions between members.

**Table 25: Alert systems need to be installed**

<b>Response</b>	<b>frequency</b>	<b>percentage</b>
<b>Strongly disagree</b>	8	9.3
<b>disagree</b>	17	19.8
<b>Not sure</b>	4	4.7
<b>Agree</b>	13	15.1
<b>Strongly agree</b>	44	51.2
<b>Total</b>	<b>86</b>	<b>100.0</b>

The findings in table 25 reveal that it was strongly agreed by (51.2%) and agreed by (15.1%) that alert systems need to be installed on all information sharing channels in and out of the organization. On the other hand, (4.7%) of respondents were not sure. It was strongly disagreed (9.3%) and disagreed (19.8%) that alert systems need to be installed on all information sharing channels in and out of the organization. Alert systems will help show messages received and those whose feedback has not been effected. This allows the concerned person to keep reminded and this will allow an effective information sharing process.

**Table 26: Security systems should be put in place**

<b>Response</b>	<b>frequency</b>	<b>percentage</b>
-----------------	------------------	-------------------



<b>Strongly disagree</b>	11	12.8
<b>disagree</b>	15	17.4
<b>Not sure</b>	2	2.3
<b>Agree</b>	20	23.3
<b>Strongly agree</b>	38	44.2
<b>Total</b>	<b>86</b>	<b>100.0</b>

The findings shown in table 26 reveal that (44.2%) strongly agreed and (23.3%) agreed that security systems should be put in place to detect intruders. 2.3% of the respondents were not sure. It was also strongly disagreed (12.8%) and disagreed (17.4%) that security systems should be put in place to detect intruders.

**Table 27: Pass word or any other effective inscription system for classified information**

<b>Response</b>	<b>frequency</b>	<b>percentage</b>
<b>Strongly disagree</b>	15	17.4
<b>disagree</b>	14	16.3
<b>Not sure</b>	0	0.0
<b>Agree</b>	16	18.6
<b>Strongly agree</b>	41	47.7
<b>Total</b>	<b>86</b>	<b>100.0</b>

From the findings shown in table 27, it was strongly agreed (47.7%) and agreed (18.6%) that pass word or any other effective inscription system should be used to protect classified information in the sharing process. It was strongly disagreed (17.4%) and disagreed (16.3%) that pass word or any other effective inscription system should be used to protect classified information in the sharing process. This allows information to reach the destination in its truthful original form

**Table 28: Interactive web based systems need to be put in place**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Strongly disagree</b>	19	22.1
<b>disagree</b>	16	18.6
<b>Not sure</b>	1	1.2
<b>Agree</b>	17	19.8
<b>Strongly agree</b>	33	38.4
<b>Total</b>	<b>86</b>	<b>100.0</b>

As indicated in table 28, it was strongly agreed (38.4%) and agreed (19.8%) that interactive web based systems need to be put in place. 1.2% were not sure of this. However (22.1%) strongly disagreed, (18.6%) disagreed that interactive web based interactive systems need to be put in place. An interactive information sharing may come in form of social networking, on line group discussions, dynamic websites, among others.

#### **4.5 Conclusion**

The above chapter has presented the study findings according to the research objectives. The findings revealed the different channels used and practices followed in the information sharing process by Human Rights Network-Uganda stakeholders. The chapter has further presented role of the feedback system in the information sharing process. Recommendations for improved information sharing in HURINET-U have also been suggested in this chapter.

Chapter 5 will present the summary, conclusion, and recommendations of the study.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.0 Introduction

The study examined information sharing in HURINET-U. It particularly looked at the channels used in the information sharing process, the impact of information sharing practices on information quality, the role of feedback in the information sharing process, and the strategies that can be adopted for improved information sharing with the different stakeholders. This chapter presents the summary of findings, conclusions, and recommendations of the study and these are presented according to the findings in chapter four.

#### 5.1 Summary of findings

The major findings of the study included the following;

##### 5.1.1 Information sharing channels in place at HURINET-U

The findings revealed that numerous information sharing channels are used by HURINET-U member organizations depending on organizational capacities and interests for the information shared. But in most situations multiple channels are used depending on the purpose and objective of the information shared. Organizations make use of formal and informal, electronic and manual, traditional and modern means of information sharing.

Findings further revealed that when the information to be shared in urgent organizations use electronic means like emails, since it is fast and efficient. Most HURINET-U member organizations use electronic channels to share their information with stakeholders. This is largely because it's an efficient and effective way of creating, sharing and storing information.

### **5.1.2 Information sharing practices at HURINET-U**

From the findings, it was revealed that at least each organization has common practices of sharing their information within and outside the organization. These practices range from use of webmail, postal deliveries, meetings, network forums, human rights events, and online social networks. Majority of the respondents revealed to use mails as the common practice of information sharing. This is in a local area intranet and emails to partner organization with in the same the organizational network

On the whole, it was observed that information sharing practices are existing organizational cultures or norms that inform the nature in which information is shared with stakeholders. These though not documented are mistaken for strategies or policies. Information is thus shared in a policy vacuum.

### **5.1.3 The role of feedback in the information sharing process at HURINET-U**

The findings revealed that majority of the organizations do not have a feedback system in place but have a way of providing feedback to their recipients. In some situations they call back to ascertain whether the information was actually delivered. To some other organizations it is the responsibility of the recipient to write back confirming receipt of

information or messages sent. This helps to confirm the status into which information was received, hence effectiveness in decision making.

Respondents asserted that when information is received as it was sent, in its completeness, accurateness and timeliness there by maintaining the key qualities of good information, it allows the receiver to use such information as per the intended objectives. This leads to improved performance through effective decision making as the result of good information. Therefore the existence of a feedback system has an impact on the quality of information shared with stakeholders.

### **5.1.3 Strategies for improved information sharing at HURINET-U**

The following are some of the outstanding strategies for improved information sharing arising from the research responses.

Secure channels need to be put in place for credible information sharing process. Secure channels which have high security defined features ensures safety of information from any intruders hence maintained quality information for effective decision making.

Regularly scheduled meetings for effective communication are also important. Having regular meetings with key persons in the organization to allow effective discussions and feedback allow free flow of information hence improved overall performance

Alert systems need to be installed on all information sharing channels in and out of the organization. Alert systems will help show messages received and those whose feedback has not been effected, this allows the concerned person to keep reminded and this will allow an effective information sharing process

## 5.2 Conclusions

From the findings, the following conclusions were reached;

Human rights organizations use multiple channels that range from formal to informal and from modern to traditional in the information sharing process. However, some staff members seem not to be very conversant on the effective and efficient application with most of these channels especially electronic ones.

The commonly used channels in the information sharing process in HURINET-U are electronic. This is largely through mails and other web based facilities which were found to be more effective and efficient in facilitating the day to day running of work especially for those very conversant with the system.

Each HURINET-U member organization has a way of sharing information which is however adoptable to other member organizations with in the network. The common practice allows members with in such an organization to share information with in and across with ease.

The common practice of sharing information in HURINET-U member organizations internally is Microsoft outlook. Webmail is commonly used for external communications.

Information sharing practices largely impact on information quality within the organization and with partner organizations. In a situation where information has delayed in postal deliveries, the purpose and objective to the information sent has always been compromised. In a situation where the format and content of information is altered the quality of information is altered, there by affecting the decision making process.

Most organizations do not have a streamlined feedback system in place, but have a way of communicating to effect feedback. This helps the sender of communication to ascertain whether the information was received in its solid state or otherwise for proper and effective decision making.

In providing feedback, most of the recipients usually call back, to ascertain whether sent communication was received and if so, in what state it was received in. This allows confidence in decision making process since there is acknowledgment that information was received and accepted as required.

Whereas HURINET-U member organizations are involved in various activities that require the use of a variety of channels and practices, there is lack of a unified blue print in form of a strategy to guide the information sharing process.

### **5.3 Recommendations**

Study findings revealed that HURINET-U shares information with a wide range of stakeholders and hence need for diverse dissemination strategies. The recommendations below were made to specific players including HURINET-U member organizations, staff, management, and board of directors involved in the information sharing process.

#### **Recommendations to the HURINET-U board of directors and management**

In view of the findings of the study, HURINET-U board of directors need to institutionalize a unified blue print for capturing, integrating, processing, delivery, and presentation of information in a clean, consistent, and timely manner. The information sharing strategy should hence put the following into consideration;

Limited channels of information sharing are in place and these needs to be enhanced with more efficient and effective information sharing systems like the human rights information and documentation system proposed by (Bombas, 2005) for human rights organizations. This should be adopted by HURINET-U for effective information sharing. With this kind of system a set of processes, tools, and standards that allow the organization to manage information strategically can be utilized to communicate effectively about human rights problems. It will help the organization get the right information to the right audience, in the right form, and at the right time.

The information sharing practices in place lack a monitoring component that over sees which information is communicated to who, when, responses received, and the impact of the same. A model of information sharing that builds on an organization's corporate database proposed by (Heeks, 2002) would be suitable for HURINET-U due to the fact that it involves creation of a corporate database which also has a report production element that processes reports in different forms, content, schedules, and roles. With this kind of information sharing module all HURINET-U information will be contained in a corporate database and reported in a timely manner while usage and responsiveness is monitored at the same time.

### **Recommendations to the HURINET-U secretariat**

The existing information sharing initiatives like the HURINET-U website should be redesigned to contain hundreds of information materials. This will enable visitors access the content they are seeking in a few mouse clicks. The visitors to the web site can sign up for email alerts to receive updates straight in their inbox. This will help to improve on



the feedback process among partner organizations and the public and this may contribute to improved coordination and service delivery.

The HURINET-U secretariat should further design a plan to guide on what information is shared, with whom, and a feedback form included to get the recipients' views on how useful the information is to them and meeting their information needs

With both HURINET-U staff and member organizations portraying limited skills in information management, the secretariat should consider designing an education programme for employees involved in the information lifecycle. The staff to train should include information custodians and communicators. The program should cover standards and practices for Information management.

HURINET-U should put into consideration the appointment of information sharing focal persons between the organization's secretariat and stakeholders. These will guide on information sharing issues, provide continued support, and ensure that information sharing standards are followed.

### **Recommendations to the HURINET-U member organizations & partners**

In light of the fact that HURINET-U stakeholders engage in different activities that necessitate use and sharing of information in different formats, a multidisciplinary approach to information sharing should be adopted. This requires that organizations put in place infrastructures that enable paper-based approaches, visualization approaches, and electronic information exchange to work in the same information sharing environment. It

will ensure multidisciplinary, multi-devised intervention with large, frequently changing, heterogeneous, multi-format organizational information.

Both member organizations and the HURINET-U secretariat will need to regularly catalogue the key information sources they possess. It will be vital to come up with a single reference point for all resources.

The endorsement and promotion of information sharing at senior and management levels is necessary and information sharing should be included as a goal in organizational strategic planning. Information management and exchange initiatives need to be adequately funded to ensure that they continue to deliver ongoing benefits to stakeholders.

Finally, HURINET-U stakeholders should explore the Rim-effect model of information exchange followed by OXFAM to foster members' skills in a practical way. This model will ensure that information is shared in a collaborative way and encourage increased contact and information sharing among HURINET-U's widely dispersed membership. Information sharing using this model will be enabled through the publication of a network news letter, a network library, exchange visits, and dissemination of other publications.

## Reference

Agranoff, R. and M. McGuire (2010). Big Questions in Public Network Management Research. *Journal of Public Administration Research and Theory*. 11(3): p. 295-326.

Aizenbud-Reshef, N., Guy I. Jacovi M. (2009). Collaborative feed reading in a community. In *Proc. ACM Press*. 277-280

Benamati, J and Lederer, A. (2000). *Rapid Change: Nine Information Technology Management challenges*, Washington DC : George Washington University

Boisot, M.H. (2005), *Information Space: A Framework for Learning in Organizations, Institutions and Culture*, Routledge, New York, NY.

Brown, S. (2004, January). *Creating a common communications culture: Interoperability in Crisis Managent*, Retrieved July 30, 2011, from Virtual Diplomacy: <http://www.usip.org/virtualdiplomacy/publications/reports/17.htm>

Cifuentes, R and Dueck, J (2006). *A Definition of Database Design Standards for Human Rights Agencies*. Washington, DC: American Association for the Advancement of Science and Human Rights Information and Documentation Systems International

Competition, and Intraorganizational Knowledge Sharing. *Organization Science*, 2002. **13**(2): p. 179-190.

Creed, W., E. Douglas, and R. Miles (2006). *Trust in Organizations: A Conceptual Framework Linking Organizational Forms, Managerial Philosophies, and the Opportunity Costs of Controls*,

in Trust in Organizations: Frontiers of Theory and Research, R.M. Kramer and T.R. Tyler, Editors. Sage Publications: Thousand Oaks, CA.

Dawes, John G., Do Data Characteristics Change According to the Number of Scale Points Used ? An Experiment Using 5 Point, 7 Point and 10 Point Scales (February 29, 2012). International Journal of Market Research, Vol. 51, No. 1, 2008. Available at SSRN: <http://ssrn.com/abstract=2013613>

Dawes, S.S. (2006). Interagency Information Sharing: Expected Benefits, Manageable Risks. Journal of Policy Analysis and Management, **15**(3): p. 377-394.

Dennis, A. R., Hilmer, K. M., & Taylor, N. J. (2008). Information exchange and use in GSS and verbal group decision making: Effects of minority influence. Journal of Management Information Systems, 14, 61–88.

Drucker, P.F., et al. (2007). Looking Ahead: Implications of the Present. Harvard Business Review. 75(5): p. 18-32

Effron, M. (2004). Knowledge Management neither knowledge nor management. In M. Goldsmith, & H. Morgan, Leading Organisational Learning, Finland, University of Oulu

Furton, M. (2003). “Discovering the true causes of failure in custom software development projects”. Computer and Internet Lawyer , pp.1-3.

Gefen, D., & Ridings, C. (2003). “IT Acceptance: Managing user IT group boundaries”. The database for advances in Information systems , pp.24-40, London: Prentice Hall

Gelmon, S., & Holland, B. (2009). Final report of the Health Professions Schools in Service to the Nation Program. San Francisco: UCSF Center for the Health Professions.

Gil-Garcia, J.R. and T.A. Pardo (2005), E-Government Success Factors: Mapping Practical Tools to Theoretical Foundations. Government Information Quarterly. **22**: p. 187-216.

Gregorio Forces Convertino, Sanjay Kairam, Lichan Hong, Bongwon Suh, and Ed H. Chi Palo (2010). *Designing A Cross-channel Information Management Tool for Workers in Enterprise*. Task Alto Research Center (PARC) 3333 Coyote Hill Road, Palo Alto, CA 94304, USA.

Halonen, R. (2004). *Many Faces of collaboration in an information system project*, London: Routledge

Handy, C. (1999). *Understanding organisations*, London: Penguin books.

Hansen, M.T., Nohria, N. and Tierney, T. (2009). What is your strategy for managing knowledge?”. *Harvard Business Review*, pp. 106-16.

Hayner, P (2006). *Investigating Large Scale Human Rights Violations Using Information Systems and Data Analysis*. Newyork: Penguin Books

Haythornthwaite, C. and Wellman, B (2008). Work, friendship, and media use for information exchange in a networked organization. *Journal of the American Society for Information Science* 49(12), 1101-1114.

Heeks, R. (2002). *Information Systems and Developing Countries: Failures, Success, and Local improvisations*, London: Prentice Hall International

Heldman, J. (2006). *A Guide to Legal and policy analysis for systems integration*, Arlington: Penguin Books

Honland, I. (2005). *Successful Communications : A toolkit for researchers and civil society organisations*, Westminster, London: Oversea Development Institute

Hopkins, W. G. (2008). *Quantitative Research Design*. Dunedin: University Of Otago

Human Rights Network-Uganda, *Capacity Tracer System*, 2010

Human Rights Network- Uganda *Constitution*, 1999

HURINET-U. (2008). *The Thematic Cluster Workshop Report*.

John Ryle (2008) *Dispatches from Disaster Zones: The importance of information-sharing among agencies*. Church House, London.

Keck, M.E. & Sikkink, K. (2008). *Activists beyond Borders: Advocacy Networks in International Politics*, Cornell University Press, New York, NY.

Kolekofski Jr., K.E. & A.R. Heminger (2009). Beliefs and attitudes affecting intentions to share information in an organizational setting. *Information & Management*. 40: p. 521-532.

Laqua S., Sasse A., Gates C., and Greenspan S., (2009). *Making Sense of the Unknown: Knowledge Dissemination in Organizations*. In 2nd Sense making Workshop at CHI 2009, Boston, MA. April 4-5, 2009.

Laudon, K. C., & Laudon, J. P. (2006). *Management Information Systems: Managing the Digital Firm*, Newyork: Prentice Hall.

Laudon, K., & Laudon, J. (2003). *Management Information Systems: Organisations and Technology in the networked enterprise*. London: Prentice Hall International

Lee HL (2009). The value of information sharing in a two-level supply chain, *Manage. Sci.*, 46: 626-643.

Liston, K. (2001). *Focused sharing of information for multi-disciplinary decision making by project teams*, Stanford, USA: Stanford University

Madden M. (2008). *Networked Workers*. Pew Internet & American Life Project. September 24, 2008.

Mankey, J. (2006). *Guidelines for Juvenile Information Sharing*. Washington D.C: Penguin Books

McDonald, D., Ackerman, M. (2007). Collaborative Refinery: A Collaborative Information Workspace for the World Wide Web. Tech Report 97-03, Information and Computer Science, Univ. of California at Irvine.

McLeod, R. (2000). Management Information Systems. London: Prentice Hall International

McNamara, C. (2010). *Brief Overview of Contemporary theories in Management*. Retrieved March 3, 2011, from Free Management Library: <http://managementhelp.org/mgmnt/cntmpory.htm>

Menzel, T.& Dortler, A. (2002). Legal Information Systems: Solutions for experts and citizens. Pacific Grove: Cole Publishing

Moran, T., Cozzi, A., and Stephen, P. F. (2005). Unified Activity Management: Supporting People in E-Business. *Comm. of ACM*, 48, (12), 67-70.

Moran, T., Cozzi, A., and Stephen, P. F. (2005). Unified Activity Management: Supporting People in E-Business. *Comm. of ACM*, 48, (12), 67-70.

Mugenda, O. (1999). *Research Methods: Quantitative and Quantitative approaches*. Nairobi: ACTS Press.

Mumford, E. (2003). *Redesigning Systems*. Hershey PA: Idea Group Publishing.

O'Brien, J. (1999). *Management Information Systems*. Arizona: Irwin McGraw-Hill.

O'Toole, L.J., (2007) Treating Networks Seriously: Practical and Research-Based Agendas in Public Administration. *Public Administration Review*. 57(1): p. 45-52.

Panteli, N., & Sockalingam, S. (2005). "Trust and Conflict within virtual inter-organisational alliances: a framework for facilitating knowledge sharing". *Decision Support Systems Journal*, pp. 599-617.

Panteli, N., & Sockalingam, S. (2005). "Trust and Conflict within virtual inter-organisational alliances: a framework for facilitating knowledge sharing". *Decision Support Systems Journal*, pp. 599-617.

Petrides, L. (2004). Knowledge Management, Information systems and organisations . NewYork, Addison: Wesley Publishing Company

Petrides, L. (2004). Knowledge Management, Information systems and organisations . NewYork, Addison: Wesley Publishing Company

Provan, K.G. (2003). The federation as an inter organizational linkage network. *Academy of Management Review*, 8(1), 79-89.

Ramayah T, Omar R (2010). Information Exchange and Supply Chain Performance. *Int. J. Info. Technol. Decision. Mak.*, 9(1): 35-52.

Sebastian, J.G., Davis, R.R., & Chappell, H. (2008). Academia as partner in organizational change. *Nursing Administration Quarterly*, 23(1), 62-71.

Singh J (2006). The importance of information flow within the supply chain. *Logistic. Inf. Manage.*, 9(4): 28-30.

Sonnenwald, D. H. and Pierce, L. G (2006). Information behavior in dynamic group work contexts: interwoven situational awareness, dense social networks and contested collaboration in command and control. *Information Processing and Management* 36(3) 461-479.

Sullivan E.J., Decker P.J. (2007). *Effective leadership and management in nursing* (4th ed.). Menlo Park, CA: Addison-Wesley.

Thompson, J.D. (2007). *Organizations in action*. New York: McGraw Hill.

Tsai, W., (2007) *Social Structure of Coopetition within a Multiunit Organization: Coordination,*

Wheatley, M.J (2006). *Leadership and the New Science: Discovering Order in A Chaotic World*. San Francisco, CA: Berrett Koehler Publishers.

Whittaker, S. and Sidner, C. (2006). Email Overload: Exploring Personal Information Management of Email. *Proc. CHI'96*, 276-283.



Zhang, J. and S.S. Dawes (2006). Expectations and Perceptions of Benefits, Barriers, and Success in Public Sector Knowledge Networks. Public Performance & Management Review. 29(4): p. 433-466.

## APPENDICES

### Appendix 1: Respondents' questionnaire

Dear Respondent, This questionnaire is designed to collect data on information sharing strategy at HURINET-U. You have been identified as one of the resourceful persons and as such you are kindly requested to spare some of your valuable time and respond to the questions/ statements as frankly and honestly as possible. This research is purely for academic purposes and your responses will be treated with utmost confidentiality. Your input is highly appreciated.

#### Section A: Respondents Background Characteristics

1. Gender      Male                       Female

2. Age Group

Below 20 yrs	20 – 30 yrs	30 – 40 yrs	40-50 yrs	50 and above
1	2	3	4	5

3. Highest level of education

<b>Diploma</b>	<b>Degree</b>	<b>Post Graduate</b>	<b>Other (Please specify)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

5. How long have you working in this organization?

<b>Less than 2 yrs</b>	<b>3– 4 yrs</b>	<b>5 – 6 yrs</b>	<b>More than 6 yrs</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

Thematic categorization of your organization

<b>Women rights</b>	<b>Child rights</b>	<b>Civil, political rights</b>	<b>Economic and social cultural rights</b>	<b>Peace and conflict resolution</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	

**Information sharing channels in place at HURINET-U**

What information do you generate that requires an effective and efficient channel system?

<b>Reports</b>	<b>Financial statements</b>	<b>Press releases</b>	<b>advocacy materials</b>	<b>Classified information</b>	<b>Others specify</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>

What activities or programs do you carry out in this organization?

<b>Human rights education</b>	<b>Monitoring</b>	<b>Advocacy</b>	<b>Research</b>	<b>Remedial</b>	<b>Others specify</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	

In your organization what are the most efficient channels of information sharing

<b>Print</b>	<b>Electronic (via email, blogs, website)</b>	<b>None printed (soft)</b>	<b>Visual</b>	<b>Audio</b>	<b>Others specify</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>

What are the main sources of information existing in your organization?

<b>Libraries</b>	<b>Resource centre</b>	<b>External backups</b>	<b>Organizational servers</b>	<b>Verbal exchanges</b>	<b>Others specify</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>

Which channel is commonly used in information sharing in this organization?

<b>Through the resource centre</b>	<b>Through the information monitoring tool</b>	<b>Google discussion group</b>	<b>Through websites</b>	<b>A combination of many of these</b>	<b>Others specify</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>

Verbal communication is one of the major information sharing channels in the organization

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

In electronic channels emails are mostly used

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

Phone calls are largely used as main channels of sharing information in and out of the organization

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

Instant messaging through social network and network discussion groups are the main channels of information sharing in this organization

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

### **The effect of information sharing practices on information quality at HURINET-U**

Do you have any information sharing practices in place?

<b>Yes</b>	<b>No</b>	<b>Not sure</b>
<b>1</b>	<b>2</b>	<b>3</b>

Elaborate on the information sharing practices used in this organization

.....

.....

.....

.....

What is the most common practice of sharing information in your organization?

<b>Reports</b>	<b>Annual general meetings</b>	<b>Network forums</b>	<b>Emails</b>	<b>Workshops</b>	<b>Human rights week</b>	<b>Others specify....</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	

The information sharing practices used in the organization influence the confidentiality of the information shared

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

The information sharing practices used ensure timeliness (delays and deliveries) of information

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

The information sharing practices used may cause distortion in the information

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

Some information sharing practices used may lead to spread of un authenticated information

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

What is your level of satisfaction with the way information is created in your organization?

<b>Very satisfied</b>	<b>Some what satisfied</b>	<b>Neither satisfied nor dissatisfied</b>	<b>Somewhat dissatisfied</b>	<b>Very dissatisfied</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

Our information processing practice meets all the qualities for good information

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

The information storage practice in this organization is excellent

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

Information dissemination practice in this organization meets the qualities of good information

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

**The role of information feedback system on organizational information quality at HURINET-U**

Do you have any feedback systems in place for information shared?

<b>Yes</b>	<b>No</b>	<b>Not sure</b>
<b>1</b>	<b>2</b>	<b>3</b>

In ensuring feedback, delivery reports are activated on all mail systems

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

Through mail practices they reply with a mail received acknowledgement

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

In postal delivery practices the officer in charge must call back to confirm receipt of information sent

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

Feedback ensures that there is clarification on information sent

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

1	2	3	4	5
---	---	---	---	---

Responses between departments are usually communicated across using notice board

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
1	2	3	4	5

Meetings are always convened within as well as at partner organizations to effect feedback to stakeholders

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
1	2	3	4	5

Communicating back guarantees credibility of information

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
1	2	3	4	5

Feedback ensures reliability of information

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
1	2	3	4	5

Feedback reduces organizational decision making autonomy

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
1	2	3	4	5

**Establish strategies to improve organization information sharing for quality information at**

**HURINET-U**

What is your understanding of an information sharing strategy?

.....

.....

.....

Does the organization has any information sharing strategy in place?

<b>Yes</b>	<b>No</b>	<b>Not sure</b>
------------	-----------	-----------------

1	2	3
---	---	---

Secure channels need to be put in place credible information

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

Regular scheduled meetings are required for effective communication

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

Alert systems need to be installed on all information sharing channels in and out of the organization

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

Security systems should be put on information sharing channels to detect intruders

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

Pass word or any other effective inscription system should be used to protect classified information in the sharing process

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

Strict guidelines should be put in place in the process of sharing information

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

Interactive web based interactive systems needs to be put in place

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

Put in place an effective feedback system

<b>Strongly disagree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>





## **Appendix 2: Interview guide**

Dear Respondent, you are requested to participate in this interview, which is aimed at collecting data on information sharing strategy at HURINET-U. You have been identified as one of the resourceful persons and as such you are kindly requested to spare some of your valuable time and respond to the questions/ statements as frankly and honestly as possible. This research is purely for academic purposes and your responses will be treated with utmost confidentiality. Your input is highly appreciated.

1. What activities do you carry out in this organization
2. Which channels do you use to share information with other partner organizations or any other information users
3. Do you have information sharing practices in place?
4. What are some of the commonly used information sharing practices in place?
5. In your own opinion how do information sharing practices affect information quality
6. Do you have any information feedback systems in place?
7. How have the information feedback systems affected or influenced information quality in this organization?
8. Do you have any information sharing strategies in place?
9. What are the most key information sharing strategies used in this organization

## **Appendix 3: List of HURINET-U member organizations**

### **WOMEN RIGHTS MEMBER ORGANIZATIONS**

1. Disabled Women's Network & Resources Organization in Uganda (DWNRO)
2. Hope After Rape (HAR)
3. National Association of Women's Organization in Uganda (NAWOU)
4. Uganda Association of Women Lawyers (FIDA)
5. Center for Domestic Violence Prevention (CEDOVIP)
6. The Bahai Faith
7. Action for Development (ACFODE)

### **CHILD RIGHTS**

1. African Network for the Prevention and Protection Against Child Abuse and Neglect (ANPPCAN)
2. HUYS LINKS Community Initiative Limited (HUYSLINCI)
3. World Vision Uganda
4. Youth Aid Uganda (YAU)
5. Concern for the Girl Child (CGC)
6. Rakai Community Based Aids Organisation (RACOBAAO)

### **CIVIL AND POLITICAL RIGHTS MEMBER ORGANIZATIONS**

1. African Centre for Treatment and Rehabilitation of Torture Victims (ACTV)
2. Foundation for Human Rights Initiative (FHRI)
3. Human Rights Focus-Gulu (HURIFO)
4. Uganda Joint Christian Council (UJCC)
5. Legal Aid Project (LAP)
6. Public Defender Association of Uganda (PDAU)
7. Human Rights Concern (HURICO)
8. Rule of Law Association (RULA)
9. Kumi Human Rights Initiative (KHRI)
10. National Foundation for Democracy and Human Rights in Uganda (NAFODU)

## **ECONOMIC, SOCIAL AND CULTURAL RIGHTS MEMBER ORGANIZATIONS**

1. Community Development Resource Network (CDRN)
2. Development Foundation for Rural Areas (DEFORA)
3. Platform for Labour Action (PLA)
4. Uganda National Health Users Consumers' Organisation (UNHCO)
5. Action Group for Health, Human Rights and HIV/AIDS (AGHA-Uganda)
6. Coalition for Health Promotion and Social Development (HEPS)
7. Sudan Human Rights Association (SHRA)

## **PEACE AND CONFLICT RESOLUTION RESOLUTION MEMBER ORGANIZATIONS**

1. Center for Conflict Resolution (CECORE)
2. Jamii ya Kupatanisha (JYAK)
3. Life Concern (LICO)
4. Isis-Women's International Cross Cultural Exchange (Isis – WICCE)
5. Rwenzori Peace Bridge of Reconciliation (RPBR)
6. Education Access Africa (EAA)
7. Good Hope Foundation for Rural Development (GHFRD)

