INFORMATION AND COMMUNICATION TECHNOLOGY OUTSOURCING AND PERFORMANCE OF HUMANITARIAN ORGANIZATIONS IN KENYA.

BY

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DECLARATION

This research project is my original work and has not been presented in any other learning institution for the award of degree, diploma or certificate.

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DEDICATION

I dedicate this research project to my dear wife Lonah, Daughter Sharney & the entire Agoti family for their support and encouragement. I will remain forever grateful.

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LIST OF ABBREVIATIONS AND ACRONYMS

BPO   Business Process Outsourcing

CARE   Cooperative for Assistance and Relief Everywhere

CIK   CARE International Kenya

CIO   Chief Information Officer

CT   Communication Technology

CSR   Corporate Social Responsibility

ERP   Enterprise Resource Planning

HO   Humanitarian Organisations

ICT   Information and Communication Technology

ICTO   Information and Communication Technology Outsourcing

IS   Information Systems

IT   Information Technology

ITO   Information Technology Outsourcing

MIS   Management Information Systems

IFRC   International Federation of Red Cross and Red Crescent societies

ICRC   International Committee of the Red Cross and Red Crescent societies

UN   United Nations

HO   Humanitarian Organizations

ABSTRACT

Information technology plays an important role in the running of organizations. With the increasing need of IT, organizations are keen to review the service delivery of this crucial service. In view of the prevailing debate over the ICT outsourcing concept there is need to shed more light on the concept. To the humanitarian organisations this research is of immense importance in measuring the maturity of several elements of their current outsourcing and provides more information on those areas that perform insufficiently.

The aim of this study was to establish the level of Information Communications and Technology outsourcing, the benefits, challenges and its impact on the performance of Humanitarian Organizations in Kenya. The study adopted a descriptive survey design. The population comprised of twenty seven Humanitarian organizations in Kenya. Sample of 135 employees were randomly selected for the study. Purposive sampling was used to select respondents for the study. The study relied on data collected through a questionnaire structured to meet the objectives of the study.

This research has provided insight to managers and other concern personnel of humanitarian organization on whether to in-source or outsources ICT services. It has also helped organizations to identify benefits and leverage on them creating time to focus more on alleviating human suffering for the common good of improving human life. The research is also crucial in adding more information to the existing body of knowledge on the outsourcing concept in relation to Humanitarian organizations in Kenya. This is an important breakthrough for academicians who will always need this information in order to advance the existing body of knowledge in regard to IT outsourcing, its penetration, challenges, Benefits and influence on performance of organizations.

Specifically the study looks into the impact of outsourcing on performance, adding to the existing body of knowledge required to assist policy makers make decisions that would change the way ICT support is handled. The study findings showed that information and communication technology outsourcing plays an important role in influence the performance of the humanitarian organizations to a large extent by assisting to improve response.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The role that Information and Communications Technology plays as a tool in optimizing operations and implementing important organisational goals cannot be underestimated. With the advent of new Information and Communication Technologies (ICTs) including personal, networked computers, the Internet services, mobile telephony, and email applications, organisations start appreciating the potential use of ICTs in advancing there program implementation. ICT, especially the Internet platform, has accelerated globalization. They are powerful tools that can give the organizations and end beneficiaries access to information and resources that foster their economic and social development. Although many individuals and organizations are already frequent users of ICTs, much more needs to be done to enhance the usage of this sector. The introduction and integration of ICTs represents huge opportunities, as well as challenges, in the process of transforming and strengthening the use of Technology.

In the last decade, Information and Communications Technology has been recognized as a critical component for the efficient operation of an organization (Lacity & Hirschheim, 1993). Organizations invest a fair amount of time and resources to design and implement ICT solutions that are aligned to their set objectives. With ICT, it has become easier for firms to communicate globally (Amiti & Wei, 2009). This is resulting from the advanced technologies and the accessibility to widespread Information and communication services. Information Systems activities can be performed and provided anywhere and at any time (David & Shao, 2007). The increased global collaboration and improved IT capabilities have been key factors influencing the growth of the utilization of IT external service strategies (Hirschheim R. , 2006). Information Technology is generic term that covers the acquisition, processing, storage and dissemination of information (Talwar, 2000). While service has been defined (UCSC, 2013) as a coherent, ready-to-use deliverable that is of value to the customer. Organizations are now more concern with performance as compared to few decades ago.

1.1.1   Information and Communications Technology Outsourcing

ICT outsourcing is an act of delegating or transferring some or all of the IT related decision making rights, business processes, internal activities, and services to external provider(s). The external providers develop, manage, and administer these activities in accordance with agreed

upon deliverables, and quality standards as set forth in the contractual agreement (Dhar, et al. , 2004). Outsourcing is promoted as one of the most powerful trends in modern management. The rationale for outsourcing some functions and/or processes includes substantial financial economies, increased ability to focus on strategic issues, access to technology and specialized expertise, and an ability to demand measurable and improved service levels (David & Shao, 2007). In today's world of complex IT solutions, high competition and the world becoming a global village, many organizations have realised that they cannot operate in isolation. The need to focus on the core areas and leave other activities to those who have expertise in those functions is taking shape in most organizations.

IT outsourcing has gotten space at both the operational and strategic functions of organizations and as the services get more and more integrated to the core service of an organizations its role remain critical. Some of the main identified services outsourced are helpdesk support services, application development, Internet services provision and management, data backup services, Network infrastructure service, Staff training on IT issues and ICT security audits policy (Arshad, May-Lin, & Mohamed, 2007). These services are important to an organizations performance and its ability to meet crucial set objectives.

Outsourcing has been identified to be of great benefit to profit making organizations that have embraced the concept (Wang, 2002). The benefits are classified as either short term while others are long term and are not realised immediately upon implementation. Some recognized benefits include the access to the state of the art technologies; the cost of operating IT services has also been significantly noted to reduce; flexibility of outsourced staff; improved focus on core business by senior management (Adams, Nelson, & Todd, 1992).

Outsourcing just like other services, emanates with different challenges. Some of the notable challenges are; doubtful supplier loyalty i.e. the organization is not certain of the consistency of service delivery, lack of a functional internal IT management i.e. while it is assumed that all IT services can be outsourced it has been noted that a functional IT unit needs to be in place to manage the process, the quality of services outsourced will depend on the market players hence a functional procurement market is crucial (Bahli & Rivard , 2003). Other significant challenges are security, confidentiality of organizational data and hidden extra costs. This compounded by controversy over the resulting jobs loss to the external service providers for the outsourced services are critical headaches (King, 2004). Despite its potential benefits, IT outsourcing may also not be a straightforward choice for a firm, this is because of

the potential risks involved, such as loss of control on outsourced activities and sharing critical data with third-parties (Willcocks & Lacity, 2001).

1.1.2   Organizational Performance

Performance is described as a set of financial and non-financial indicators which offer information on the degree of achievement of an organization's objectives and results (Lebans & Euske, 2006). For organizations it is only through performance indicator identifications that they are able measure their achievement. Knowing the determinants of organizational performance is important especially for an organization to know which factors should be treated with keen interest in order to improve the organizational performance.

Performance comprises the actual output or results of an organization as measured against its intended goals. There are several factors contributing to the overall performance of organizations (Chenhall & Langfield-Smith, 2007). It is necessary to have a measure against which humanitarian organizations' performance is evaluated to ensure that they are able to response to the raising needs of humanitarian support in the fast evolving world.

1.1.3   ICT outsourcing and performance

ICT plays major role in the general organizational performance. The relationship between IT and organizational performance can be established by reviewing the various indicators. Some of the main indicators include the degree of organizational success, response time to disasters or emergence situations, standardization of processes, beneficially and donor satisfaction, and cost (Neely & Gregory, 1995). Outsourcing of IT services in humanitarian organisations is essential as it can enhance the efficiency of the organisation and help bring innovative solutions to existing problems in the developing world (Fjermestad & Saitta, 2005).

No matter how attractive ICT outsourcing and performance are portrayed, the early adopters were faced with quite a few problems, which overtime might have been addressed. Some of the challenges were legal, while others were purely on the operationalization of the outsourcing concept. The main problem has been the stability of the service providers. In addition, several connectivity and access problems were noted (Schwyn, 1999).

The pressure on CIOs to improve IT systems with an expectation of guaranteeing improvement in the overall organizations performance cannot be downplayed. A study aimed at identifying the relationship between an ERP implementation and organizational

performance was done, and conclusion drawn that the implementation of the ERP system has a positive effect on organizational performance, the magnitude of its impact is smaller immediately after implementation, being intensified over time (Dehning & Richardson, 2002).

1.1.4 Humanitarian Organizations

Humanitarian Organizations are entities whose key mandate is to alleviate human suffering in the society. The organizations achieve this important goal by timely response to both man-made and natural disasters; reduce poverty at the household level by fostering development and to providing relief in disaster emergencies (UNICEF, 2014). Most of the organizations work in close collaboration with governments and have closely related objectives (IFRC, 2013). The funding for humanitarian organisations is mainly from donors, who have been touched by the suffering of the poor and governments which channel their resources through them. The key areas of activity include but are not limited to; provision of basic needs, education, development, disease control, response to natural calamities and human conflict among others.

Humanitarian organizations in the world are faced with a myriad of challenges, Kenya is not an exception. In the recent years, man-made and natural disasters have been on the rise which poses a major challenge on government and societies. To help alleviation human suffering, humanitarian organizations have chipped in to play a vital role in taking care of the affected during emergencies. Over the years the Humanitarian Organizations have built a network and trust among the less fortunate as key partners in humanitarian support programs. The key characteristic to note is the non-profit making dimension of their service. The organizations have a long history with the Red Cross being one of the very first organizations formed by Henry Dunant in 1863 (ICRC, 2014). Over the years other international humanitarian organizations have been formed, with UN taking the lead controlling role.

Most of the humanitarian organizations working at the international level have been created over the last twenty-five years in the course of European Union enlargement, in countries like Spain, Finland, Poland, and United Kingdom among other countries. Before this move only national Red Cross Society was in existence, most of the organizations have been formed to respond to the raising humanitarian need (Ryfman, 2007). In his submission Ryfman also notes that with the rising number of Non-Governmental Organization, the UN should take the

role of coordinating their activities. There are over five thousand humanitarian and development organizations in Kenya (Appendix II). By evaluating the performance of humanitarian support in relation to ICT, a keen interest is taken on the use of technology in innovative ways to humanitarian projects, as it plays critical component in helping extend the impact, reach and scale of initiated programs by both the international and local humanitarian organizations (Munodawafa, 2008).

1.2 Problem Statement

The impact of natural and man-made disasters on human life has been enormous and of great concern. Human life has been lost, people forced to live in in-human conditions and others maimed for life (Schmale, 2014). Most of natural disasters occur in remote areas with limited ICT services, in this cases ICT incapacitated teams in humanitarian organizations find themselves setting up ICT systems from scratch, in some cases taking months to understand the administrative and technical challenges in a locality. The role of ICT in improving human life can no longer be downplayed notes (Jacob, 2008).

New humanitarian challenges arise every day, to cater for these challenges, new and innovative solutions are required. In a time of rapid technological improvement, the potential to use ICT to improve the quality of humanitarian project implementation is increasing exponentially (Noordende, 2010). ICT can play a key role both in prevention of humanitarian catastrophes and in building capacity to improve disaster response and in addition help to strengthen coordination and communication in emergencies. It is against this background that he study intends to find out what is the impact of embracing ICT outsourcing in the humanitarian organizations.The beseeching question is will a decision to outsource ICT services leads to improved organizational performance?.

Over the last few years, there has been an increase in academic and business research on ICT outsourcing (Lacity & Willcocks, 1995). Nevertheless, there are few studies that take a comprehensive approach in evaluating information technology outsourcing in the humanitarian organizations. Many have reviewed the concept of ICT outsourcing in relation to profit generating organizations (Schullman, Harmer, & Dunleavy, 1999). It is in view of this that the research will evaluate the performance of humanitarian organizations in relation to ICT outsourcing.

The dilemma in relation to the real cost saved after outsourcing is still a major challenge to decision makers (Bryce & Useem, 1998). Notes that there is increased concern that cost savings in outsourcing of services have been overvalued as the costs are at times higher after outsourcing.

Various studies have been carried out on IT outsourcing (Dibbern & Goles, 2004). However, when it comes to IT outsourcing one has to note that relying only on the results achieved by those studies would be misleading because of the large heterogeneity within services and the different purpose they serve to different organizations (Abraham & Katharine , 1996). Profit making and non-profit making organizations services are hardly comparable on their intentions on IT outsourcing services; this study aims at filling this knowledge gap.

This research paper will analyse and try to fill the gaps related to ICT outsourcing from the Humanitarian perspective. The study also seeks to examine the the benefits and challenges of ICT outsourcing and the overall impact of outsourcing ICT services in the performance of humanitarian organizations in Kenya. In their recommendation (Arshad, May-Lin, & Mohamed, 2007) indicated that further research on the role of ICT in performance development need to be carried out.

1.4   Objectives of the Study

The study seeks to evaluate Information and Communications Technology Outsourcing (ICTO), in humanitarian organisation in Kenya specifically,

a) Determine the extent to which humanitarian organizations have outsourced their ICT services
b) Establish the benefits of ICT outsourcing in humanitarian organisations
c) Establish the challenges of IT outsourcing in the humanitarian organisations
d) Determine the effect of ICT outsourcing on the performance of humanitarian organizations.

1.5   Importance of the Study

This research will provide insight to managers and other concern personnel of humanitarian organization on whether to in-source or outsource ICT services. It will also help organizations leverage on the identified benefits and focus more on alleviating human

suffering for the common good of improving human life. Quantifying the impact of IT outsourcing on organizations' performance will help management make valuable decisions on IT outsourcing and also shed light on the prevailing debate over the ICT outsourcing concept. To the humanitarian organisations it may be of immense importance in measuring the maturity of several elements of their current outsourcing and provide a solution for those areas that perform insufficiently.

The policy-usefulness of the research findings cannot be underrated; organisations need to standardize processes through well researched policies (Abraham & Taylor, 1996). This will be important in ensuring that efficient support systems are implemented. This research will help policy makers mould policies that are in line to the changing Information Technology field. Profit making organization have over the years invested heavily in research and development to help management make informed decisions, the HO should not be an exception.

Humanitarian organizations whose key role is to alleviate human suffering will find this crucial in decisions making on the ICT processes that can be improved in order to be more effective and efficient in service delivery. Noting that the research is not specific to any one single humanitarian organisation, the outcome can be used by general humanitarian sector organisations hence reducing the costs incurred if anyone organization wanted to carry out the research. In most cases organisations have blindly implemented solutions that they have no much information about leading to high costs and lose as they face complete project failure. The research project will help the Humanitarian organisations make informed decisions based on evidence.

The research is also crucial in adding more information to the existing body of knowledge on the outsourcing concept in relation to Humanitarian organizations in Kenya. This will be a key breakthrough for academicians who will always need this information in order to advance the existing body of knowledge in regard to IT outsourcing, its penetration, effect on performance of humanitarian organizations in Kenya.

CHAPTER TWO: LITERATURE REVIEW

2.1   Introduction

This chapter reviews the Information and Communications Technology service, Business Process Outsourcing and, a general overview of ICT outsourcing. The benefits and challenges of ICT outsourcing, the impact of outsourcing ICT services to the general performance of organisations and the developed conceptual framework on ICT outsourcing.

2.2   Information Technology in Organizations

Information Technology is a common term used to describe computer-based information systems that support collaboration among individuals, groups and departments (Howard, 2005). With the changing and complex work environment, it is difficult for an organization to operate in isolation, in this perspective Information Technology has acquired more critical roles and wider definition that IT covers hardware, software, telecommunications, databases and other technologies which organizations use in order to advance their performance (Daft, 2000). The terms ICT and IT are used interchangeably, IT reflects more recent growth in computer applications that support information and data exchange at all levels within and outside an organization (Collins, 2002).

In the last two decades Information Technology has played key role in the operations of organizations both in profit and non-profit making organizations. The importance of IT in organizations can no longer be underestimated as it takes a more strategic role in running organizational activities, some of the key functions of IT include; mailing, internet connection, data sharing and depending on the nature of business the roles are sometimes varied. Being critical in the daily operations of organizations, over the years IT has been redefined to reflect its new role.

Information Communications Technology is critical for humanitarian organizations, as in cases of emergency; the organizations must be able to exchange information internally as well as externally with the communities and government departments involved in coordinating the relief effort. Also vital to any humanitarian operation is the need to communicate with donor agencies and the media to create public awareness of the humanitarian needs in a given area.

2.3 Business Process Outsourcing (BPO)

Is defined as the contracting a third party (vendor) to perform non-core but critical processes on behalf of an organization because it makes some economic and technical sense (Howard, 2005). Business Process Outsourcing is used to mean IT enabled services (ITES), because most business processes are automated using IT, hence referred to as IT enabled services. 73% of BPO customers surveyed believe BPO is improving their outsourced processes and been considered to transform economies to higher levels of growth (Terra, 2005).

BPO is seen as an important branch and trend of outsourcing that many management theories for outsourcing can be applied to. BPO started with non-core processes and is now moving towards more critical applications (Abraham & Taylor, 1996). BPO's success can be assessed based on four key benchmarks i.e. (a) How successfully the project implementation was done. (b) Improvement in organization's performance. (C) Improvement in IT performance. (d) How successful are the relations between customer and supplier (Gilley & Rasheed, 2000). In Kenya the concept of Business Process Outsourcing has been reinforced by the government under vision 2030 (GoK, 2011).

2.4 ICT Outsourcing

Outsourcing is promoted as one of the most powerful trends in modern management (Bendor-Samuel, 2000). The rationale for outsourcing some functions includes substantial financial benefits, increased ability to focus on strategic issues, access to new technology and ability to demand measurable and improved service levels. Outsourcing differs from alliances, partnerships or joint ventures in that the flow of resources is one-way, from the vendor to the outsourcer; typically, profit sharing is not a common practice (Belcourt, 2006).

In the mid-1960s there were computer service bureaus that ran a variety of programs, mainly financial and operational applications, but since the landmark Kodak IT outsourcing deal in 1989, when Kodak decided to source out substantial parts of their IT to a consortium headed by IBM, IT outsourcing has increased considerably worldwide (McFarlan & Nolan , 1995). The deal is regarded as the break through leading to all other mega-deals in later times as "imitative behaviour" of Kodak's decision (Mary & Lacity, 1993). After Kodak's decision the way was paved for the rapid growth of IT outsourcing. Among these have been, for instance, British Aerospace and Canadian Post Office who embraced outsourcing (Hirschheim & Lacity, 2000).

2.5   Outsourcing Decision

In theory efficient organisations will allocate their resources within the value chain to those activities that give them a comparative advantage (Belcourt, 2006). Outsourcing is expected to imply cost saving relative to internal production or internal service function (Quelin & Duhamel , 2003). Previous studies found that organizations choose to outsource to gain several potential benefits, outsourcing of repetitive and non-value adding activities allow firms to focus more on strategic activities like financial planning (Brown & Duguid, 2002). In other cases cost reduction and focus on strategic activities are often offered as reasons for outsourcing (Bendor-Samuel, 2000). The decision to outsource needs a critical analysis of the available options. Outsourcing decision framework given in Figure 2.1 demonstrates the typical elements of the outsourcing choices and shows where various components e.g. Motivations, benefits, risks, are the factors most of the time considered in making the decision (Kremic & Tukel , 2003).

Figure 2.5.1: Outsourcing decision framework
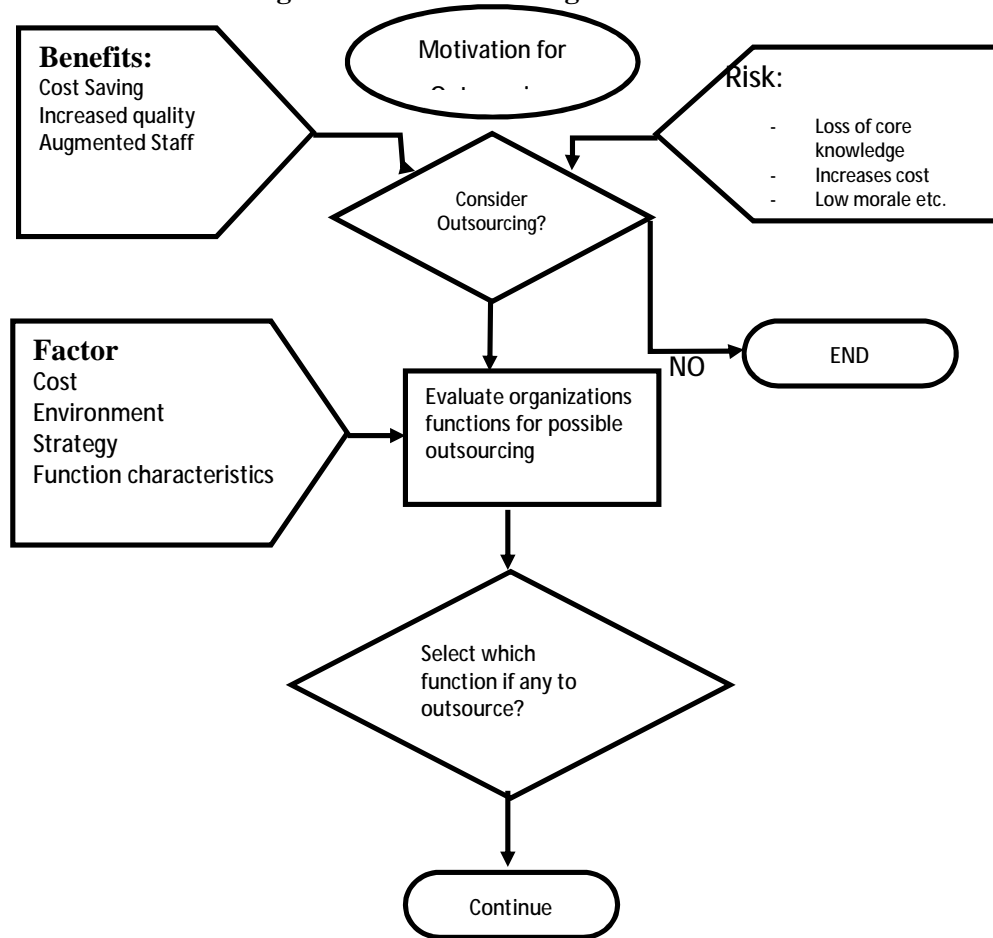
Adapted from (Kremic & Tukel, 2003)

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2.6   Benefits of Outsourcing

Organizations are influenced to outsource ICT services by different reasons, significant among this being; focus on organization's core business, improvement of technology and service quality, access to knowledge and technology that the organization does not have (Prado & Takaoka, 2002). Organizations often apply outsourcing to achieve tactical goals like cost reduction and business efficiency by concentrating on core business, however there is a stronger focus on the strategic side of outsourcing, in this case outsourcing can also be used to transform organizations, acquire new capabilities and bring fundamental strategic and structural change (Linder, 2004).

Cost saving has been identified as one of the main benefits of outsourcing. This refers to the costs savings the customer enjoys from outsourcing (Sako, 2006). ICT outsourcing also leads to substantial improvements in organization`s performance, which might result in competitive advantages for the outsourcing firms. Both the private sector and governments outsource their ICT project and services for many reasons. Improving business efficiency by focusing on organizational core business is also another influencing factor (Amiti & Wei, 2009). The outsourcing of ICT for some companies is away to answer to the technological needs of the organization with services of high quality. IT outsourcing has made a significantly positive contribution to output and labour productivity in organizations and the flexibility in provision of technical support is also an anticipated benefit (Hans, 2010).

The continued drive for greater efficiency, has forced many organizations to focus on their core objectives (Kanaracus, 2008). By outsourcing services organizations focus on their core activities which contribute most to their set objectives (Faber, 2004). Obtaining the ICT industry's best practices and capabilities is an important factor influencing the decision to outsource; other benefits include; access technical resources that are not available, increase productivity by reducing IT problems and establish a consistent level of service to the organization.

2.7   Challenges of Outsourcing

Beyond the benefits of ICT outsourcing approach, comes number of challenges that could emerge and need to be analysed well in advance (Schwyn, 1999). Some of the main operational challenges experienced by firms include limited availability of human resources with appropriate experience level to maintain and improve service quality, poor service

delivery, and critical concerns around data privacy after outsourcing (Narayanan & Swaminathan, 2007).

The increased diversity resulting from an outsourced team can lead to a stronger team and better quality; however, owing to poor communication it can also lead to poor decision making, poor productivity and poor relationships among members of staff (Fabriek, 2008). Another identified challenge with outsourcing emanates from the workers themselves as they fear loss of job (Farrell, 2003). In organizations where it is not well handled this leads to minimal support by the organization's internal workforce to facilitate a successful process of an outsourced service, example is in a scenarios where the service provider needs information to facilitate the process, it is critical that the internal staff give full support for the process to succeed.

The loss of control over systems management is also a fundamental concern (Kakabadse & Kakabadse, 2000). After outsourcing IT services the activities are managed by the third party who might also be having contracts with various other companies, this diminishes the control over how to run the ICT services. In some cases new organizational changes can be challenged by the outsourced company, as in most cases they will be analysing cost implications of new changes vis-a-vis available resources.

Data security is also a major concern, the security control compliance of service providers and users should be monitored and reviewed periodically. The organisation must reserve the right to audit responsibilities defined in the service level agreement, and have those audits carried out by an independent third party to ensure that the organizations data is secure (Siponen, 2000). The client organisation shave to confirm that the vendor employs adequate security controls in accordance with the organization's IT security policies, wider regulatory requirements and industry's best practices.

2.8   Impact of ICT on Performance

The organizational impact of ICT has generated considerable interest among academicians in recent years, organizational performance is influenced by a number of factors, but the role that ICT plays cannot be down played (Kanaracus, 2008). In the early years attempts to define information system success were ill-defined due to the complex, interdependent, and multi-dimensional nature of ICT (Mclean & Delone, 1992). Organizations had difficult linking success to improved IT systems or vice versa. The relationship between information

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system quality and the end benefits has significant support within the literature. Studies have established a significant relationship pointing to the fact that improved ICT services have a direct relationship with organizational performance (Adams, Nelson, & Todd, 1992).

One of the key indicators of organizational performance is the response time to disasters; this can be classified into the average response time, the duration of project verses the planned duration, the presence of database and materials clearly captured in database (Bresnahan, 2002). The performance of an organization can be analysed by looking at the overall cost saving, gross marginal profit associated with ICT investment outweighs its marginal cost (Griliches, 1997). Positive relationship between information and communication technologies and productivity in various sectors, along with declining marginal returns, indicating that improvements in productivity are losing force over time (Aetic, 2005).

The cooperation and standardization of service delivery is a key factor when analysing organizational performance in relation to ICT services. The degree of information sharing; standardization of procedures, tools in disaster management are also critical. Noting that humanitarian organizations depend on donor contributions for financial upkeep the beneficiaries and donor satisfaction to measure the performance is critical. The Funding of projects over time and the number of beneficiaries reached is also a key indicator (Prasad & Harker, 1997).

2.9   Conceptual Framework

The research conceptual framework in Figure2.2 is built based on a combination of several past literatures and the research objectives. The research model evaluates the effect of ICT Outsourcing in humanitarian organizations, taking into account expected input, the other key factors that influence ICT services delivery and finally the achieved output.

The conceptual framework represents the relationship between three components; independent variables, dependent variables and the controls. The Conceptual framework has been developed from the reviewed literature and related theories, it gives a good starting point as it is based on 'what is known', based on the literature review.

The conceptual framework is modelled with various independent variables i.e. Helpdesk support, Applications development, Internet services management, Data backup services, Network infrastructure setup and support and staff training. These are important IT services whose management critically determines the quality of IT service and by extension an

organization's performance. The variables are utilized in different quantities by different international organizations and their impact on organization's performance will be analysed.

Helpdesk support; This is a central point of contact, handling IT user request for incidents, service requests and problems to be solved. The service desk types are based on the skill level and urgency of resolving the issues. Application development service; is the part of IT that works closely with the business to develop new software, keep them running, and make ongoing improvements on the applications for the better organizational performance. Internet service management; Internet is generally defined as a global computer network providing a variety of information and communication facilities, consisting of interconnected networks. The provision of globally networked IT systems is defined as internet service.

Data backup services; in information technology, data backup, refers to the copying and archiving of computer data so it may be used to restore the original in case of loss or corruption of the original data. This is a critical service as it encompasses the entire organization information management process. Staff training on IT; this involves teaching staff various Information technology services usages, with an objective of maximizing their output with the help of the latest technologies. Various training services can be outsources, this includes training staff on email management, desktop services, Microsoft office suite, and internet services.

On the other hand we have control variables; these are the factors that affect the general organizational performance with or without the identified independent variables, noting that the performance of an organization even with all identified independent variables will still depend on the availability of funding, individual staff experience and size of the organization. These are important in evaluating the role that outsourcing plays on performance of humanitarian organization.

The dependent variables are used as indicators to evaluate the performance of humanitarian organizations. To help in the evaluation four main dependent variables have been identified (1) Response time, this is the time it is taking organizations to complete projects and also to response to disasters. (2) Cost management is a key identified indicator too. (3) Donor funding, is a factor that is used to reflect performance of an organization. (4) Level of project implementation is also important in evaluating general performance of an organization.

Figure 2.2: ICT outsourcing performance framework

CONCEPTUAL FRAMEWORK

Independent variables

(Outsourced Services)

Service desk support

Applications Development & Maintenance

Internet service management

Data backup services

Network infrastructure services

Staff training on IT

Dependent variables

(Organization Performance)

- Response time
- Cost saving
- Donor funding
- Level of project implementation

Control variables

(Organizational set-up)

- Individual staff experience
- Organization coverage
- Availability of funding

(Agoti, 2014)

Summary of the Literature Review

The chapter reviewed the available literature related to ICT outsourcing. It gives an introduction to ICT services, outsourcing concept, Business process outsourcing and decision making in relation to outsourcing concept, the benefits and challenges of outsourcing and conceptual framework. From the literature review is came out clear that a lot of research has been carried out keenly taking focus on profit making organizations. From the review, a clear gap on the impact of ICT outsourcing in the humanitarian sector has been identified.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter deals with the descriptions of methods that were used to carry out the study. The subsections includes research design, target population, sampling procedures and sample size, research instruments, methods of data collection and data analysis.

3.2 Research Design

The study adopted the descriptive statistics to determine the effect of ICT outsourcing in humanitarian organizations, descriptive research is concerned with conditions that already exist, practices that are held, processes that are ongoing and trends that are developing (Lovell & Lawson, 1971). Descriptive survey research design is most appropriate when the purpose of study is to create a detailed description of an issue (Mugenda & Mugenda, 1999) the questions give an opportunity not only to get information and opinions but also allow a further probe to the underlying issues

3.3 Target Population

All the twenty seven humanitarian organisations operating in Kenya with offices in Nairobi but having operations all over the country were identified and invited to participate in the research (Annex III). The twenty seven organisations were selected based on the fact that all operate with an objective of giving support to the less fortunate in society and those exposed to both manmade and natural disasters. All the organizations have a strong IS and technology focus and they all contend with a market where skilled resources are not an option, but a necessity. The organisation representatives that completed the survey included; ICT managers, network administrators and three users of ICT resources.

3.4 Sampling Procedure and Sample Size

In a descriptive survey, a sample enables a researcher to gain information about the population (Kothari, 2004). The participants in this study were carefully selected so that they could fully represent their various organizations through purposive sampling. IT managers , IT network administrators and three program implementers were chosen based on their involvement in decision-making and heavy dependency on ICT for their day today's operations and experience as far as the impact that is felt based on the ICT quality of service. This sampling is illustrated in table 3.4.1

A sample is a representative part of the population that is methodologically selected to participate in a study (Cooper & Schindler, 2003). At least 10% of the population is a good representation where the population is large and 20% where the population is small (Gay & Diehl, 1992). Research advisor developed a table taking into account the confidence levels i.e. either 95% or 99%. It also takes into account the error margin this study will adopt a 95 % confidence level and a 2.5% error margin (Krejcie & Morgan , 1970) hence all the 27 organizations were sampled. Given the heterogeneous nature of the workers, it was assumed that this sample is representative of all workers. The sample size for this study was 135. Comprising of IT managers, IT network administrators and three end-users of the ICT services that are programme implementers in the respective organizations.

In cases where the organization has completely outsourced its ICT services, then the questionnaire was given to a carefully reselected staff (but not the part of the outsourced team) to ensure that a fair feedback is given.

Therefore these 27 humanitarian organizations (N = 27) were chosen to be the sample population and questionnaires were sent to all of them. This was more than 10% and would therefore represent the population under study. The respondents for the questionnaire were also derived from the same sampling list,

Table 3.4.1 Sample Plan

	Sample Size
ICT Managers	27
IT officer/ Network administrators	27
End-user (Disaster Management)	27
End- user (Finance/accounts department)	27
End user program implementation	27
TOTAL	**135**

3.5 Method of Data Collection

The method of data collection has to be appropriate to the particular research being carried out and that at the point of the data collection; the objective must always be to gather evidence to achieve the research objective (McNiff, Leonard, & McNamara, 2000). The

research instruments that were used in this study where primary data was collected ware questionnaires. Questionnaires are useful instrument of collecting the primary data since the respondents can read and then give responses to each item and they can reach a large number of subjects (Orodho, 2004). The respondent in this research have been keenly identified as per the positions that are privy to most of the required information. The questionnaire (Annex II) has been segmented to four different sections i.e. A, B, C and D. Section A covers the demographic data of the respondents; Section B on ICT outsourced services, Section C Benefits; Section D challenges while Section E on the impact on performance. The data was collected and analysed to help determine the impact of ICT outsourcing in humanitarian organizations.

3.6 Data Analysis method

Data analysis involves the summarization of the bulky data collected from participants in a research (Cooper & Schindler, 2006). In this study data analysis is guided by the objectives of the study. Both the inferential statistics, stratifying and sample descriptive statistics, such as percentages which can easily be understood especially when making results known by a variety of readers will be used.

Objective (a), (b), (c) and (c) will be analysed using descriptive statistics. Frequency tables, bar graphs and pie charts will be used to analyse the quantitative data. The responses to open ended items (qualitative data) in form of phrases and words will be organized followed by creating categories, themes and patterns related to the research questions. Objective (d) will be analysed using inferential statistics and strafing the outsourced services against the performance measures. In the analysis the following model will be used.

$Y = a_0 + a_1X_1 + a2X_2 + e$ where Y= Performance of organization, X_1= Outsourced resources

X_2= Control variables, e= Marginal Error, a_0, a_1, a_2, = coefficient parameters.

The primary data will be transferred to a computer sheet and processed using statistical software package, which is able to handle large amounts of data; time saving and also efficient (Martin & Acuna, 2002).

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter is segmented into six sections. The first section looks at the demographic information of the respondents. The second section looks at the extend of outsourcing in humanitarian organizations, section three looks at the benefits of IT outsourcing, section four reviews the challenges , section five analyses the perceived challenges while the last one analyses the impact of IT outsourcing on performance. The data has been presented in tables, graphs and pie charts. The responses were analysed using descriptive statistics.

4.2 Demographic Information

4.2.1 Response Rate

Out of 135 questionnaires which had been administered to the interviewees, 123 of them were received back for analysis. This transforms to 91.1% return rate of the respondents. Overall, the response rate can be considered to have been high as tabulated in table 4.2.1

Table 4.2.1: Response Rate

Response	Frequency	Percent
Issued	135	100%
Returned	123	91.1
Not Returned	12	8.9 %

4.2.2 Background information of the respondents

The study sought to find out the age bracket of the respondents, this is to help know the distribution of different ages in the International Humanitarian organizations. This is for general information and is not an objective of the study.
The results are shown in the Table 4.2.2

Table 4.2.2: Distribution of the respondents by age

AGE	Frequency	Percent	Cum. Percent
20-25	17	13.82%	13.82%
25-35	55	44.72%	58.54%
36-50	46	37.40%	95.93%
Over 50	5	4.07%	100.00%
Total	123	100.00%	100.00%

From the Table 4.2.2, majority of the respondents who participated in the study are aged between 25-35 years taking 44.72%, this is closely followed by 36-50 years taking 37.40% of the respondents. The table further reveals that 13.82% are aged 20-25 years, while those above age 50 years take the lowest percentage of 4.07%. This could imply that majority of employees in the humanitarian organizations are middle aged probably reason being that employers tend to retain their employees or employ experienced staff from other sectors.

4.2.3 Duration of service

The study sought to find out how many years the respondent has worked. This is for general information and is not a direct objective of the study. The results are tabulated in table 4.2.3 below.

Table 4.2.3: Number of years worked

WORKEDYEARS	Frequency	Percent	Cum. Percent
>1	10	8.13%	8.13%
2-5	29	23.58%	31.71%
5-10	54	43.90%	75.61%
Over 15	30	24.39%	100.00%
Total	123	100.00%	100.00%

Table 4.2.3, shows that 43.90 % of the respondents have worked for over 5-10 years. The table further reveals that 24.39% have worked for 2-5years, 24.39% for over 15years and 8.13% for

less than one year. The findings give an indication that the organizations have the highest percentage of employees who have been in employment for over 5 years.

4.2.4 Gender of respondent

The study sought to find out the distribution of the respondents by gender to know which gender is the majority in the humanitarian sector. This is for general information and is not a direct objective of the study. The findings are presented in the Table 4.2:

Table 4.2.4: Distribution of respondents by Gender

SEX	Frequency	Percent	Cum. Percent
Female	58	47.15%	47.15%
Male	65	52.85%	100.00%
Total	123	100.00%	100.00%

From Table 4.2.4 , it is evident that majority of the respondents who participated in the study were male represented by 52.85%, followed by females 47.15%   This could imply that the humanitarian organizations have more men , but noting that the questionnaire also targeted specific departments, it might be biased. Looking at the percentage difference it is also noted that it is minimal, making humanitarian organization less gender biased.

4.2.5 Distribution of the respondent by education level

The study sought to find out the education level of the respondents. This is for general information and is not a direct objective of the study. The results are shown in Table 4.2.5

Table 4.2.5: Distribution of the respondent by education level

EDUCATION LEVEL	Frequency	Percent
Diploma	27	21.95%
Doctorate	1	0.81%
O-Level	1	0.81%
Post Graduate	34	27.64%
Undergraduate	60	48.78%
Total	123	100.00%

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Table 4.2.5 shows that almost half of the respondents (48.78%) have attained undergraduate Level of education, 27.64 % have attained postgraduate level of education and a good minority 21.95% have attained diploma level of education. It is also noted that both Doctorate and O-level are at bar at 0.81% The findings depict the humanitarian organizations employs well learned professionals who have attained tertiary level of education, but the number is limited for those with doctorate qualifications.

4.3 Extend of ICT outsourcing in humanitarian Organizations

The respondents have different levels of outsourcing for the different information technology services that can be outsourced. The services that are outsourced were; application & software development, Data backup services , Helpdesk/support services, internet services , mailing system services , Network infrastructure, printing services and staff training.

The table below tabulates the frequency and percentage of the different services outsourced, percentage outsourced and the frequency.

Table 4.3.1: ICT outsourcing

Application/Software development	Frequency	Percentage	Cum. Percent
No	33	26.83%	26.83%
Yes	90	73.17%	100.00%
Total	123	100.00%	100.00%
Data backup service	Frequency	Percentage	Cum. Percentage
No	66	53.66%	53.66%
Yes	57	46.34%	100.00%
Total	123	100.00%	100.00%
Helpdesk support Service	Frequency	Percentage	Cum. Percentage
No	98	79.67%	79.67%
Yes	25	20.33%	100.00%
Total	123	100.00%	100.00%
Internet service	Frequency	Percentage	Cum. Percentage
No	38	30.89%	30.89%
Yes	85	69.11%	100.00%
Total	123	100.00%	100.00%
Mailing system service	Frequency	Percentage	Cum. Percentage
No	43	35.25%	35.25%
Yes	79	64.75%	100.00%
Total	122	100.00%	100.00%
Network infrastructure	Frequency	Percentage	Cum. Percentage
No	66	54.10%	54.10%
Yes	56	45.90%	100.00%
Total	122	100.00%	100.00%
Printing services	Frequency	Percentage	Cum. Percentage
No	74	60.16%	60.16%
Yes	49	39.84%	100.00%
Total	123	100.00%	100.00%

Graph 4.3
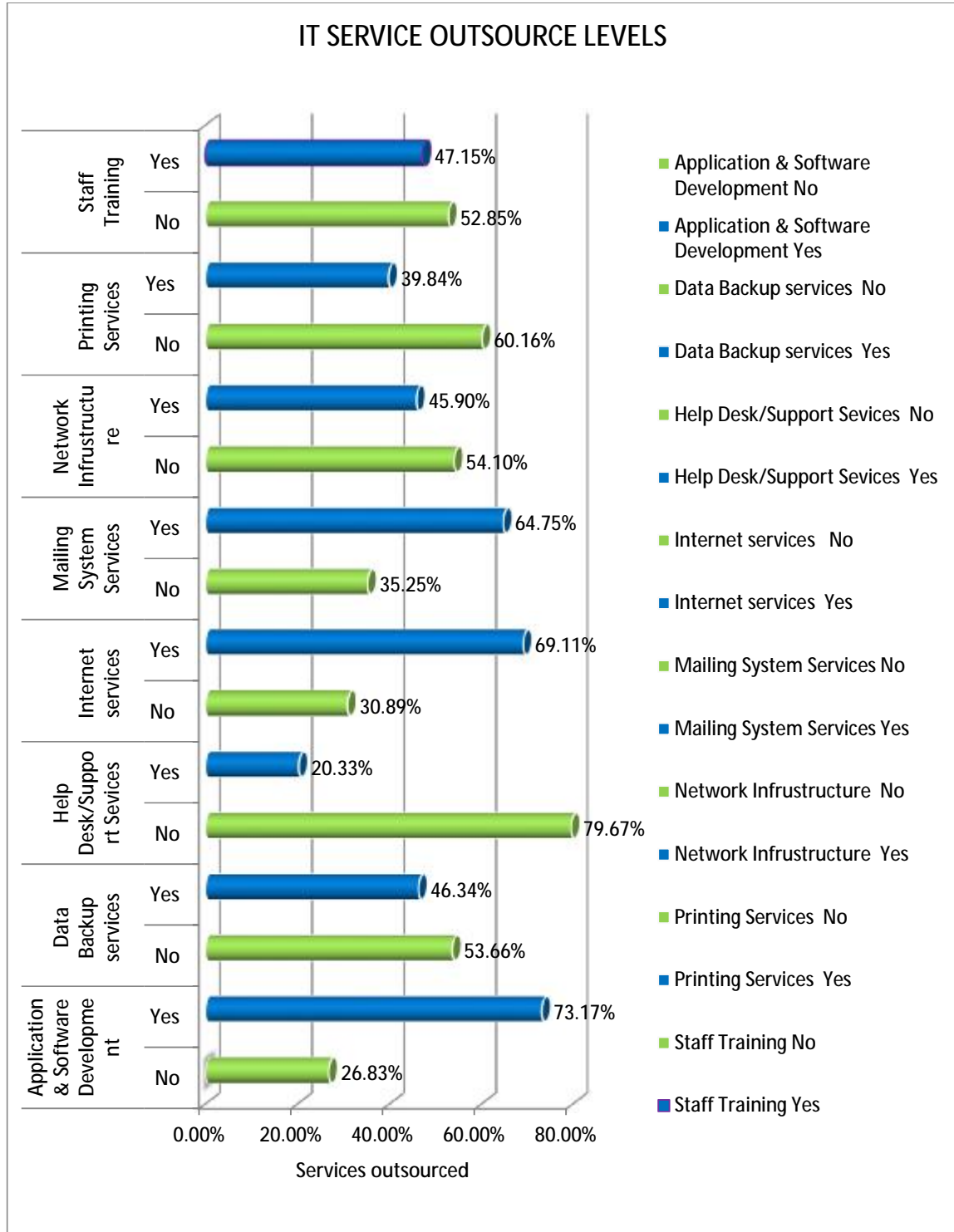
From the responses, Application and software development is the highest Information Communications and Technology outsourced service with 73.17% of the respondents having the service outsourced. This is closely followed by internet service whose 69.11% , The third most outsourced is mailing service at 64.75% , followed by mailing services 53.66% , staff training 47.15% , Data backup service 46.34% , Network services at 45.90%, Printing services 39.84% and finally Helpdesk services which are the least outsourced at only 20.33%.

Table 4.3.2 ICT outsourcing Cumulative

	No	Yes	
Application/Software development	33	90	
Data backup service	66	57	
Helpdesk support Service	98	25	
Internet service	38	85	
Mailing system service	43	79	
Network infrastructure	66	56	
Printing services	74	49	
Staff training	65	58	
	483	499	982

Table 4.3.3

Cumulative percentage outsources services

ICT services outsourced	Yes	No
Fraction outsourced	0.50814664	0.491853

Level of Information Technology Outsourcing
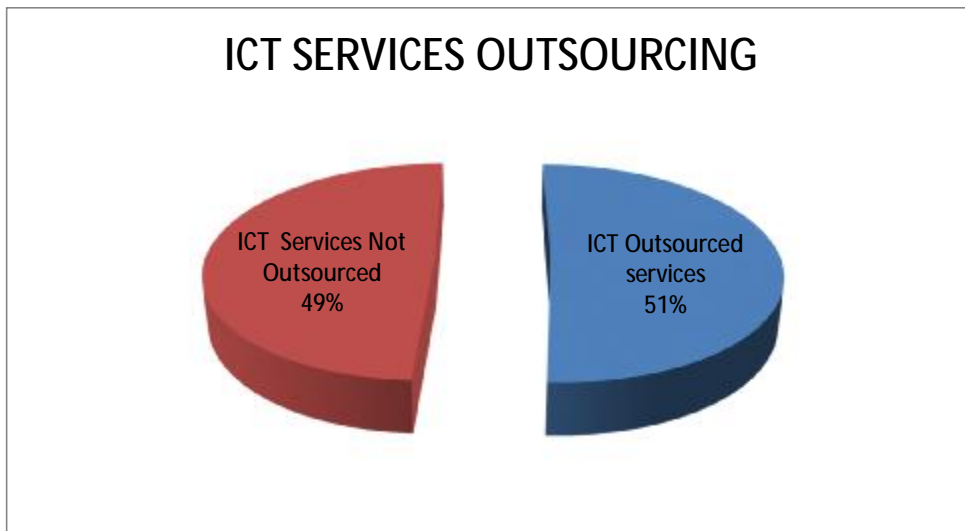
From the above pie chart, 51% of the respondents indicated that they have outsourced ICT services while 49% have not outsourced the services. A breakdown of the individual outsourced service levels is tabulated and analysed into different graphs in Annex I

4.4 Establish the benefits of ICT outsourcing in humanitarian organisations

Table 4.4.1

	Non	Little	Moderate	Large	Very large
Better Application Development	15	5	43	44	16
Better Help desk support	29	31	46	16	1
Better Internet service	1	6	43	42	31
Better trained staff	8	29	52	25	9
Efficient Email Communication	8	13	42	28	32
Focus on key mandate	11	15	44	51	2
Communication Benefit	24	34	28	19	18
Improved data security	9	27	39	44	4
Improved Program implementation	14	19	44	42	4
Improved response time	14	19	71	12	4
Information benefit	14	20	54	18	17
Latest technologies	7	9	26	48	32
More stable IT services	8	11	46	49	8
Reduced IT costs	21	29	36	32	4
Strategic benefits	4	23	65	17	14
Better data backup	24	35	20	31	12
Efficient support	13	17	58	30	4

Level of benefits of outsourcing

Table 4.4.2

No benefit	Little Benefit	Moderate Benefit	Large Benefit	Very Large Benefit
224	342	757	548	212
10.7537206	16.41862698	36.34181469	26.30820931	10.17762842

BENEFITS OF INFORMATION TECHNOLOGY OUTSOURCING
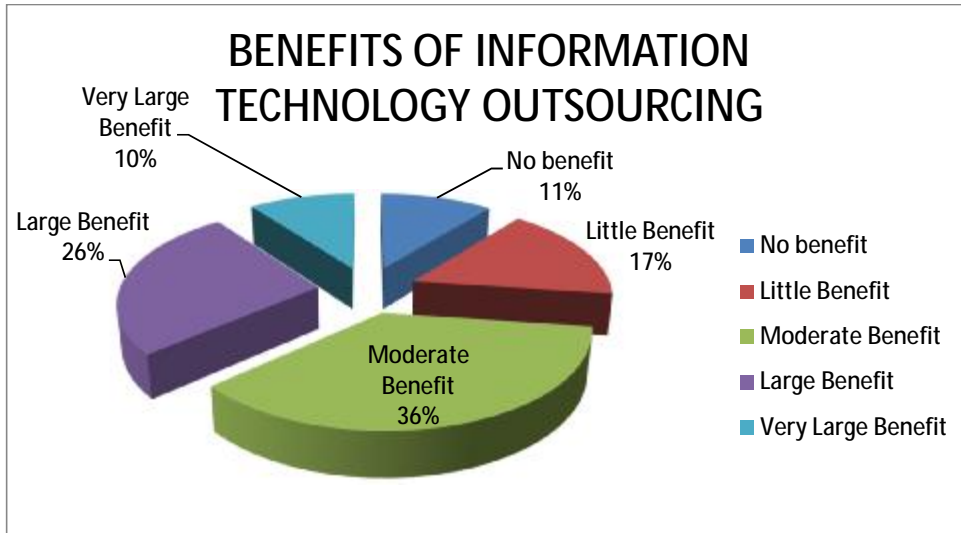
Tables 4.4.1 shows that 10% of the respondents have appreciated that ICT outsourcing has very large benefits, while 26% indicated that there are large benefits, this is followed by the highest 36% who belief that the benefits are moderate. Those who belief that there are little and no benefits at all are 17 % and 11% respectively. The findings give an indication that in humanitarian organizations the belief in the benefits of ICT outsourcing is high.

The study sought to find out from the respondents if as an individual, the outsourcing of ICT services is of benefit to the organization. This question is a direct subject of the study as it shows the benefits of outsourcing ICT services. The detailed analysis on the individual benefits is in annex I.

4.5 Establish the challenges of IT outsourcing in the humanitarian organisations

In the research one of the objectives was to establish the challenges faced by Humanitarian organizations in relation to ICT outsourcing. Table below cumulatively puts together all the response on the eight anticipated challenges of ICT outsourcing

Table 4.5.1

	Non	Little	Moderate	Large	Very Large	Total
Increased Costs	8	28	51	13	23	
Delayed Response	2	24	81	14	2	
Poor Quality Service	21	69	27	6	0	
Reduced Flexibility	3	23	29	62	6	
Data security Risk	2	20	14	29	58	

Limited IT experts	12	42	53	12	4	
Poor Communication	16	43	46	14	3	
Fear of job loss	2	19	24	50	27	
Loss of Control	15	7	32	45	24	
Cumulative Response	**81**	**275**	**357**	**245**	**147**	**1105**

Table 4.5.2

Total percentages

Response	Non	Little	Moderate	Large	Very Large
percentage	7.33%	24.89%	32.31%	22.17%	13.30%

Pie Chart

CHALLENGES OF ICT OUTSOURCING
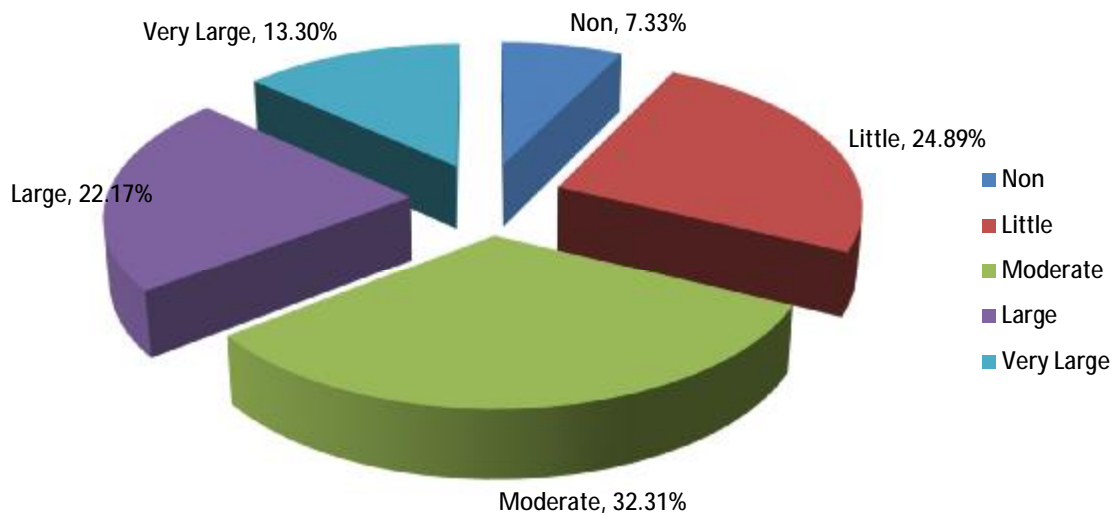
From the responses, 13.30 % of the respondents feel that the ICT services that the organisations have outsourced have very large challenges; this is closely followed by 22.17% who feel that the challenges are large. The biggest percentage of 32.31% feels that the

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challenges are moderate while 24.89% responded that the challenges are little. A good percentage of 7.33 % feel that there are no challenges on the services that have outsourced. The detailed graphs of the challenges experienced by the respondents are in annex I.

4.6 Establish the perceived challenges even the service has not been outsourced

The research also sought to establish the perceived challenges from the respondents which can affect their desire to embrace outsourcing of their ICT services, this was to take into account respondents who have not outsourced a service but might be having the anticipated challenges preventing them from recommending the outsourcing option.

Table 4.6.1 Challenges

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree		
Delayed Response	1	42	46	32	1		
Fear of job Loss	35	30	33	17	8		
Increased cost	26	33	28	30	6		
Limited IT experts	12	10	32	48	16		
Loss of Control	34	38	27	14	7		
Poor Communication	7	16	51	39	9		
Poor Quality service	1	18	54	47	2		
Data Security risk	44	40	29	7	2		
	160	**227**	**300**	**234**	**51**		**972**

Table 4.6.2

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
		0.2335390	0.30864	0.24074	
Aggregate of total	0.164609053	9	2	1	0.052469136
Percentage	16%	23%	31%	24%	5%

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PERCEIVED CHALLANGES IN CASE OF OUTSOURCING

Strongly Disagree, 5%

Strongly Agree, 16%

Disagree, 24%

Agree, 23%

Neutral, 31%

■ Strongly Agree   ■ Agree   ■ Neutral   ■ Disagree   ■ Strongly Disagree
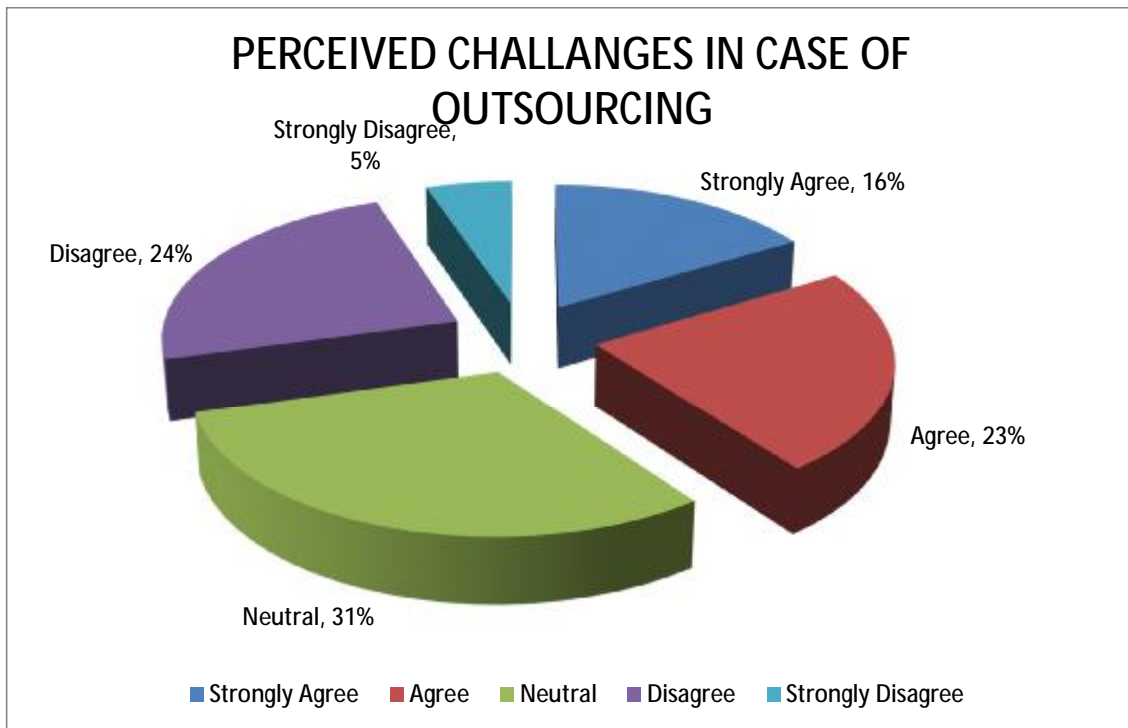
4.7 Determine the effect of ICT outsourcing on the performance of humanitarian organizations

The research sought to find ways IT outsourcing has affected performance in the respondent's respective organizations. From the data received it is it indicates that outsourcing has an impact on performance of humanitarian organizations.

Funding from donors

This is one of the key indicators of an organizations performance, good donor funding is as a result of good performance over time.

FUNDING	Frequency	Percent
31-60 %	29	23.58%
61-90%	46	37.40%
Over 90%	48	39.02%

From the respondents, 77% indicate that their ICT services are fully funded. This has a direct relationship with the outsourcing of the key ICT services. This is resulting from prompt feedback to donors as a result of efficient systems.

From the table it is noted that the high number that indicated the service is outsourced also recorded highest level of funding.

Organizational coverage

COVERAGE	Frequency	Percentage
> 30%	26	21.14%
31-60 %	17	13.82%
61-90%	46	37.40%
Over 90%	34	27.64%

Respondents who indicated that their organizations have outsourced Software development are noted that the area of coverage is wide. This might be as a result of the ability to reach a wide network through improved ICT applications.

Project implementation as per plan

From the table below, those who reported having outsourced Software development outsourcing reported the highest percentage of project implementation

APPLICATION & OFTWAREDEVELOPMENT='Yes'		
PROJECTIMPLEMENTATION	Frequency	Percentage
31-60%	17	18.89%
61-90%	44	48.89%
Over 90%	29	32.22%

ICT operational costs

Those who responded that the IT costs are high are also noted to have reported as having outsourced ICT services.

ICT OPERATIONAL COST='High'

Application and software Development	Frequency	Percentage
No	6	13.04%
Yes	40	86.96%
Total	46	100.00%

Budget utilization as per plan

This was stratified between budget utilization and outsourcing of software development. From the results in table below, it is noted that those who reported over 90% budget utilization have also had their organizations outsource ICT service.

BUDGET UTELIZATION='Over 90%'

Application and software development	Frequency	Percentage
No	14	24.56%
Yes	43	75.44%
Total	57	100.00%

Detailed tables in the annex I.

Additional suggestions and recommendations

The study sought to find out the impact of information and communication technology outsourcing on performance of humanitarian organizations. It is recommended from the results that outsourcing is important for an organization to benefit from some of the latest technologies, better data backups, stable internet service and better network infrastructure. It is recommended that more analysis can be carried on the data to have more detailed and item specific impact on organizational performance.

CHAPTER FIVE: SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The basic purpose of this chapter is to give the summary, conclusions and recommendation of the study. This was based on the research findings that is presented and discussed in the previous Chapter.

5.2 Discussions

This section comprises of discussion based on the specific research objectives of the study.

The findings reveal that majority of the respondents were males, majority of the respondents are between twenty five and thirty five years who have attained university's undergraduate level of education. The findings further reveal that half of the respondents who participated in the study have worked for 5-10 years.

The findings reveal that over 50 percent of the respondents agreed that outsourcing of ICT services has benefits to the general performance of the organization. To large extent use of ICT services has improved the performance humanitarian organization. The study agrees with the statement that outsourcing of ICT has an important influence on the organization's performance. The study findings reveal that majority of the respondents gave the data security risk as the highest challenge.

The performance of organisation performance in terms of funding has a direct relationship with the ICT service outsourcing, of great interest to note is that respondents who had services outsourced , reported a higher level of funding.

5.3 Conclusions of the Study

On the basis of the above findings, the following conclusions were made on the influence of Information and communication technology outsourcing on the performance of humanitarian organizations in Kenya. The study found out that, the use of ICT outsourcing has benefits which the humanitarian organizations have adopted to a large extent has improved their performance. The study found that majority of the respondents of the sampled humanitarian organizations, appreciate the outsourcing of application and software development the findings affirmed that, the benefits of outsourcing affects the overall performance of an organization.

The study affirms that the cost of outsourcing does not necessary reduce after outsourcing, as in the research it is one of the main concerns is the increased cost of outsourced services.

5.4 Summary of findings

This study aimed at assessing the influence of information and communication technology outsourcing on the performance of the Humanitarian organizations in Kenya. The task included; determine the extent to which humanitarian organizations have outsourced their ICT services establish the benefits of ICT outsourcing in humanitarian organisations, establish the challenges of IT outsourcing in the humanitarian organisations, and determine the effect of ICT outsourcing on the performance of humanitarian organizations.

The research reviewed previous studies with a view to establish academic gaps which the present study sought to bridge. This was done through library research. The procedure included:

Reading, evaluating the methodology employed in terms of design choice, target population, sample and sampling procedure data collection instruments (that is suitability, validity and reliability), data collection procedures, data analysis, findings and recommendations.

The study benefited so much from the literature review for it guided the present study by pointing to areas that need to be investigated. The study employed quantitative research as the main approach to guide the study. The target sampled respondents were 135 respondents from twenty seven humanitarian organizations in Kenya. The research instrument used in data collection was a questionnaire from the respondents. To ensure validity of the instruments, expert opinion was sought. Data analysis was started immediately after the field. Data was summarized into frequencies and percentages and presented in graphs, pie charts and tables.

From the research the following can be noted, the benefits of ICT outsourcing surpass the challenges. It is also noted that some of the benefits are hidden and one need to do a thorough review to the underlying benefit. From the ICT outsourcing performance framework, it can be noted that the control factors also play a role in the overall performance of organizations.

5.5 Recommendations

On the basis of the above conclusions, the following recommendations were made in relation to Outsourcing of information and communication technology on the performance of humanitarian organizations in Kenya.

From the findings the study recommends that; that organizations need to identify the key areas within the Information and Communications technology that have the highest benefits and list challenges or negative impact on the performance

From the findings the study also recommends that Humanitarian organizations should outsource software development, Mail services to maximize on the benefits that have been identified by the organizations that are already using the service.

5.6 Areas for further research

This study sought to assess the influence of information and Communication Technology outsourcing on the performance of the humanitarian organizations in Kenya. Particularly analysing the benefits, challenges and influence on performance attempting to bridge the gap in knowledge that existed. Although the study attained these, it mainly focused on humanitarian organizations there is need to replicate the study using many other smaller organizations as to find out, if there are any other factors influencing performance of humanitarian and communication technology on the performance Kenya. There is need to conduct study which will attempt to find out if the use of ICT outsourcing in small organizations will positively impact performance.

It is also recommended to carry out further research to determine the role of the other control variables that were not analysed in this research paper.

REFERENCES

Abraham , G., & Katharine , G. (1996). Firms' Use of Outside Contractors ;Theory and Evidence. *Journal of Labor Economics, 14*, 394-424.

Abraham, K., & Taylor, S. (1996). Firms' Use of Outside Contractors: Theory and Evidence. *Journal of Labor Economics, 14*, 394-424.

Adams, D., Nelson, R., & Todd, P. (1992). Perceived usefulness, ease of use, and usage of information technology: a replication. *MIS Quarterly, 16*(2), 227–247.

Aetic, D. C. (2005).

Amiti, M., & Wei, S. (2009). Services Off shore and Productivity: Evidennce from the US . *World Economy*, 203- 220.

Arshad, H. N., May-Lin, Y., & Mohamed, A. (2007, August). ICT outsourcing: Inherent risks, issues and challenges. *WSEAS Transactions on Business and Economics, 4*(8).

Bahli, B., & Rivard , S. (2003). The information technology outsourcing risk: A transactioncost and agency theory-based perspective. *Journal of Information Technology, 18*(3), 27-33.

Belcourt, M. (2006). Outsourcing — The benefits and the risks. *Human Resource Management Review, 16* , 269–279.

Bendor-Samuel, P. (2000). *Turning lead into Gold: The dymystification of outsourcing.* Executive Excellence.

Bresnahan. (2002). Empirically analyze how combining ICT and organizational design positively affects firm productivity.

Brown, J., & Duguid, P. (2002). The social life of information. *Boston: Harvard Business School Press.*, 19-21.

Bryce, D., & Useem, M. (1998). The impact of corporate outsourcing on company value. *European Management Journal, V., 16* (No. 6), 635-643.

Chenhall, R., & Langfield-Smith, K. (2007). Multiple perspectives of performance measures. *European Management Journal, 25*(4), 266−282.

Collins, P. (2002). *Virtual and Networked Organizations.* Oxford: Capstone Publishing.

Cooper, D. R., & Schindler, P. S. (2006). *Business Research Methods.* (9, Éd.) USA: McGraw-Hill.

Cooper, D., & Schindler, P. (2003). *Business Research Methods* (éd. 8). Tata: McGraw-Hill.

Daft, R. (2000). New era in Management. Orlando.: The Dryden Press.

David , J., & Shao, B. (2007). The Impact of Offshore Outsourcing on IT Workers in Developed Countries. *Communications of the ACM* , 89-94.

Dehning, B., & Richardson, V. (2002). Returns on investments on information technology: A research synthesis. *Journal of Information Systems, 6*(1), 7-30.

Dhar, Vasant, & Margrethe, O. (1989). Assumptions Underlying Systems That Support Work Group Collaboration, in Margrethe H. Olson, ed., Technological Support for Work Group Collaboration. 33-50.

Dibbern, J., & Goles, T. (2004). Information systems outsourcing: A survey and analysis of the literature. *The DATA BASE for Advances in Information Systems, 35*(4), 6-102.

Faber, M. (2004). *The Outsourcing institute*. Consulté le january 15, 2014, sur www.outsourcing.com/howandwhy/articles/strategicoutsourcing.main.htm. 1.: http://www.outsourcing.com

Fabriek, M. (2008). Reasons for success and failure in offshore software development projects. *16th European Conference on Information Systems.* , (pp. 13-17). Galway, Ireland.

Farrell, D. (2003). *New Horizons : Multinationals investing in developing economies.* Sab Francisco: McKinsey Global Institute's report.

Fjermestad, J., & Saitta, J. (2005). A strategic framework for IT outsourcing: a review of the literature and the development of a success factor model. *Journal of Information Technology Case and Application Research, 7*(3), 27-60.

Gay, L., & Diehl, P. L. (1992). *Research methods for business and management.* New York: Macmillan.

Gilley, K., & Rasheed, A. (2000). Making more by doing less: analysis of outsourcing and its effects on firm performance. *Journal of Management, 26*, 763-790.

GoK. (2011, May 11). Retrieved from http://www.vision2030.go.ke/index.php/pillars: http://www.vision2030.go.ke

Griliches, Z. (1997). Comments on measurement issues in relating IT expenditures to. *Economics of Innovation and New Technology, 3*, 317-321.

Hans. (2010). Returns to Information Technology Outsourcing. *Information System Research.*

Hirschheim, R. (2006). Challenge to the Information Systems Discipline, In Information Systems Outsourcing. *Enduring Themes, New Perspectives and Global challenges. Offshore Outsourcing*, 687-699.

Hirschheim, R., & Lacity, M. (2000). The Myths and Realities of Information Technology Insourcing. *Communications of the ACM, 43*(2), 99-107.

Howard, M. (2005). Collaboration and the 3DayCar – a study of automotive ICT adoption. *Journal of Information Technology, Vol. 20*(4), 245-258.

ICRC. (2014, April 12). *ICRC*. Retrieved from http://www.icrc.org/eng/who-we-are/history/index.jsp: http://www.icrc.org/eng/

Jacob, M. (2008). ITU Southern and East Africa Workshop on. *Role of Telecommunications and ICTs in Disaster Management* (pp. 3-4). Lusaka, Zambia: SATA Secretariat.

Kakabadse, A., & Kakabadse, N. (2000). Sourcing: new face to economies of scale and the emergence of new organizational forms. , *Knowledge and Process Management,, 7* (2), 107-18.

Kanaracus, C. (2008, April 3). global IT spending growth stable. *InfoWorld*, pp. 17-26.

King, W. R. (2004). Outsourrcing and the future of I.T. *Information Systems Management, 21*(4), 83-84.

Kothari, C. (2004). *Research Methodology.* (éd. 2nd). New Age International Publishers.

Krejcie, & Morgan . (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement,, 30*, 607-610. Retrieved February 05, 2014

Kremic , T., & Tukel , O. (2003). *Assisting public organizations in their outsourcing endeavors a decision support model.* Cleveland, OH.: Cleveland State University.

Lacity, M., & Willcocks, C. (1995). Information systems outsourcing in theory and practice. *Journal of Information Technology, 10*(4), 203-207.

Lacity, M., & Willcocks, L. (1995). Information systems outsourcing in theory and practice. . *Journal of Information Technology*.

Lacity, M., & Hirschheim, R. (1993). The Information Systems Outsourcing bandwagon. *Sloan Management Review, Vol. 35*(1), pp. 73-86.

Lebans, M., & Euske, K. (2006). A conceptual and operational delineation of performance. *Business Performance Measurement*, 15-18.

Linder, J. (2004). Transformational Outsourcing. *MIT Sloan Management Review, 45* (2), 52-58.

Lovell, k., & Lawson, K. (1971). *Understanding Research in Education.* London: London University Press.

Martin, K., & Acuna, C. (2002). *SPSS for Institutional Researchers.* Bucknell: Pennsylvania University Press.

Mary, C., & Lacity, k. (1993). The Information Systems Outsourcing bandwagon. *In: Sloan Management Review, 35*, 73-86.

McFarlan, W., & Nolan , R. (1995). How to Manage an IT Outsourcing Alliance. *MITSloan Management Review*, 11-14.

Mclean, E., & Delone, W. (1992). Information systems success: the questfor the dependent variable. *Information Systems Research, 3*(1), 60–95.

McNIFF, J. (2002.). *Action research for professional development; concise advice for new action researches.* Consulté le 08 31, 2006, sur http://www.jeanmcniff.com/booklet1.html.

McNiff, J., Leonard, D., & McNamara, G. (2000). *Action Research in Ireland.Dorset.*

Mugenda, O., & Mugenda, A. (1999). *Research Methods: Quantitative and Qualitative Approaches.* Nairobi: ACTS Press.

Munodawafa, J. (2008). *Role of Telecommunicationsand ICTs in Disaster Management.* Lusaka: Southern Africa Telecommunication Association.

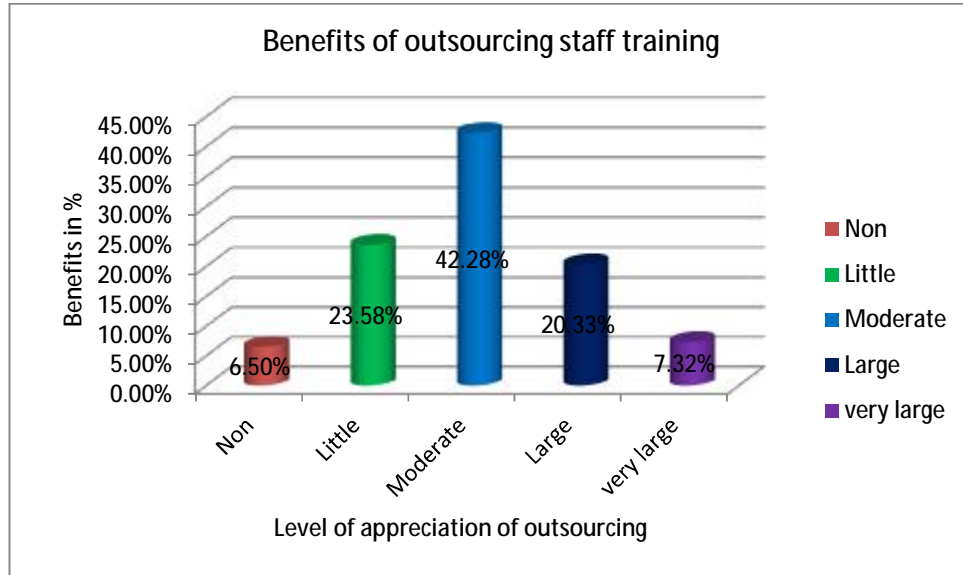
Narayanan, S., & Swaminathan, J. M. (2007). *Information Technology Offshoring to India: Pitfalls, Opportunities and Trends,*. Consulté le January 11, 2014, sur http://public.kenan-flagler.unc.edu/Faculty/swaminaj/research/paper/NS2.pdf.

Neely, A., & Gregory, M. (1995). Performance measurement systems design: a literature review and research. *International Journal of Operations & Production Management, 15*(4), 80-116.

Noordende, V. S. (2010). *Accenture Development Partnerships.* Livingstone Media.

Orodho, J. A. (2004). *Techniques of Writing Research Proposals and Reports in Education and Social Sciences.* Nairobi: Masola Publishers.

Prado, E., & Takaoka, H. (2002). The factors that motivate the adoption of informationtechnology outsourcing: Analysis of the industrial sector of São Paulo. *Journal of Contemporary Management, 6* (3), 129-147.

Prasad, B., & Harker, P. T. (1997). *Examining the contribution of information technology toward productivity and profitability in U.S. retail banking*, pp. 97-101.

Quelin, B., & Duhamel , F. (2003). Bringing together Strategic Outsourcing and Corporate Strategy. *Outsourcing Motives and Risks', European Management Journal, 21*(5), 620-628.

Ryfman, P. (2007). Non-governmental organizations: an indispensable player of humanitarian aid. *International Review of the Red Cross, 89* (865), 12-14.

Sako, M. (2006). Outsourcing and Offshoring: Implications for Productivity of Business Services. *Oxford Review of Economic Policy,, 22*(4), 499-512.

Schmale, M. (2014, January 21). *IFRC*. Retrieved 01 02, 2014, from www.ifrc.org: http://www.ifrc.org

Schullman, ,. D., Harmer, M., & Dunleavy, J. (1999). *Shared services:adding value to the business units.* New York: Wiley.

Schwyn, R. (1999). How to approach IT outsourcing. *Health Management Technology, 20*(6), 28-31.

Siponen, M. (2000). A conceptual foundation for organizational information securityawareness. *Information Management & Computer Security, 8*(1), 31-41.

Talwar. (2000). Dreamlandís Dictionary of Information Technology., (p. P.187). New Delhi.

Terra, E. (2005). Study on BPO satisfaction conducted. *managing offshore and information week.* Retrieved from
http://ubmtechnology.mediaroom.com/index.php?s=43&item=413

UCSC. (2013, October 10). *http://its.ucsc.edu*. Retrieved from
http://its.ucsc.edu/itsm/servicedef.html: http://its.ucsc.edu/itsm/servicedef.html

UNICEF. (2014, 5 12). *unicef kenya*. Récupéré sur http://www.unicef.org/kenya/

Wang, E. T. (2002). Transaction attributes and software outsourcing success: An empiricalinvestigation of transaction costs theory. *Information Systems Journal, 12*, 115-123.

Willcocks, k., & Lacity, M. (2001). Global Information Technology Outsourcing. *In Search of Business Advantage. Chichester: John Wiley & sons .*, 99-125.

Annex I

BENEFITS OF OUTSOURCING

i.   Better Trained staff

ii.   Helpdesk support

iii.   Better Application Development

Benefit of Application & software development outsourcing

iv.   Better internet service

Benefits of Outsourcing Internet service

v.   Better Data backup

Benefits of data backup outsourcing

Benefits in % (y-axis): 0.00%, 5.00%, 10.00%, 15.00%, 20.00%, 25.00%, 30.00%

Non 19.67%, Little 28.69%, Moderate 16.39%, Large 25.41%, Very large 9.84%

Level of Appreciation on outsourcing

Legend: Non, Little, Moderate, Large, Very large

vi.   Efficient support

Benefits on support Outsourcing

Benefits in % (y-axis): 0.00%, 5.00%, 10.00%, 15.00%, 20.00%, 25.00%, 30.00%, 35.00%, 40.00%, 45.00%, 50.00%

Non 10.66%, Little 13.93%, Moderate 47.54%, Large 24.59%, Very large 3.28%

Level of appreciation of outsourcing

Legend: Non, Little, Moderate, Large, Very large

iii

vii.   Improved response time

Benefits on Response time

- Non: 11.67%
- Little: 15.83%
- Moderate: 59.17%
- Large: 10.00%
- Very large: 3.33%

Y-axis: Benefits in %
X-axis: Level of appreciation on outsourcing

viii.   Reduced ICT costs

Benefits of Outsourcing on cost

- Non: 17.21%
- Little: 23.77%
- Moderate: 29.51%
- Large: 26.23%
- Very Large: 3.28%

Y-axis: Benefits in %
X-axis: Level of appreciation on outsourcing

ix.   Improved program implementation

Benefit of Outsourcing on Program implementation

Non — 11.38%
Little — 15.45%
Moderate — 35.77%
Large — 34.15%
Very large — 3.25%

Benefit in % (y-axis)
Level of appreciation of Outsourcing (x-axis)

x.   Focus on key mandate

Benefit of Outsourcing on Focus on key Mandate

Non — 8.94%
Little — 12.20%
Moderate — 35.77%
Large — 41.46%
Very large — 1.63%

Benefit in % (y-axis)
Level of Appreciation on outsourcing (x-axis)

xi.   Information Benefits

Benefit of Outsourcing on Information sharing

Benefits in %

45.00%
40.00%
35.00%
30.00%
25.00%   43.90%
20.00%
15.00%
10.00%   11.38%   16.26%   14.63%   13.82%
5.00%
0.00%

Non   Little   Moderate   large   Very large

Level of Apprectaion on outsourcing

- Non
- Little
- Moderate
- large
- Very large

xii.   Strategic benefits

Strategic Benefits on Outsourcing

Benefits in %

60.00%

50.00%

40.00%

30.00%   52.85%

20.00%
        18.70%
10.00%   13.82%   11.38%
3.25%
0.00%

Non   Litttle   Moderate   Large   Very Large

Level of appreciation of Outsourcing on strategic benefits

- Non
- Litttle
- Moderate
- Large
- Very Large

xiii.   Communication Benefits

Communication Benefit on Outsourcing

Benefit in %

- Non — 19.51%
- Little — 27.64%
- Moderate — 22.76%
- Large — 15.45%
- Very Large — 14.63%

Appreciation of Outsourcing in relation to communication

Legend: Non, Little, Moderate, Large, Very Large

xiv.   More stable IT services

ICT Service Stability Benefit on Outsourcing

Benefit in %

- Non — 6.56%
- Little — 9.02%
- Moderate — 37.70%
- Large — 40.16%
- very Large — 6.56%

Appreciation of Outsourcing on Service Stability

Legend: Non, Little, Moderate, Large, very Large

xv.   Improved Data Security

Data Security Benefit on Outsoursing

xvi.   Latest Technologies

Latest Technology Benefit on Outsourcing

xvii.   Efficient Email Communication

Benefit of Efficient Email communication on outsourcing

Benefit in %

- Non 6.50%
- Little 10.57%
- Moderate 34.15%
- Large 22.76%
- Very large 26.02%

Appreciation of Efficent mail communication on Outsourcing

B) CHALLENGES EXPERIENCED IN RELATION TO ICT OUTSOURCING

i.   Increased costs

Increased Cost

Challange in %

- Non 6.50%
- Little 10.57%
- Moderate 41.46%
- Large 22.76%
- Very Large 18.70%

Level of increased cost Challenge

ii.   Delayed response

Delayed Response

- Non
- Little
- Moderate
- Large
- Very large

1.63%   19.51%   65.85%   11.38%   1.63%

Level of Delayed Response challenge

Challenges in %

iii.   Poor Quality service

Poor Quality Service

- Non
- Little
- Moderate
- Large
- Very Large

17.07%   56.10%   21.95%   4.88%   0.00%

Level of Poor quality service challange

Challanges in %

iv.   Reduced flexibility

Reduced Flexibility

Challange in %

Non	
Little	
Moderate	
Large	
Very Large	

2.44%   18.70%   23.58%   50.41%   4.88%

Level of reduced flexibility Challenge

v.   Data Security Risk

Data Security Risk

Challengaes in %

Non	
Little	
Moderate	
Large	
Very large	

1.63%   16.26%   11.38%   23.58%   47.15%

Level of Data security Challenge

vi.   Limited IT experts

Limited IT experts

Challange in %

Level	Value
Non	9.76%
Little	34.15%
Moderate	43.09%
Large	9.76%
Very large	3.25%

Level of Limited IT experts challenge

Legend: Non, Little, Moderate, Large, Very large

vii.   Poor Communication

Poor Communication

Challange in %

Level of poor communication challenge

Legend: Non, Little, Moderate, Large, Very Large

viii.   Fear of job loss

Fear of Job loss

Challanges in %
(Level of fear of job loss challenge)

- Non
- Little
- Moderate
- Large
- Very Large

1.64% 15.57% 19.67% 40.98% 22.13%

ix.   Loss of Control

Loss of Control

Challange in %
(Level of Loss of control Challenge)

- Non
- Little
- Moderate
- Large
- Very Large

12.20% 5.69% 26.02% 36.59% 19.51%

C) WHAT CHALLENGES OUTSOURCING OF ICT SERVICES CAN LEAD TO

i.   Increased Cost

INCREASEDCOSTS1	Frequency	Percent
Strongly Agree	26	21.14%
Agree	33	26.83%
Neutral	28	22.76%
Disagree	30	24.39%
Strongly Disagree	6	4.88%

ii.   Delayed response

Delayed Response	Frequency	Percent
Strongly Agree	1	0.82%
Agree	42	34.43%
Neutral	46	37.70%
Disagree	32	26.23%
Strongly Disagree	1	0.82%

iii. Poor Quality service

Poor Quality service	Frequency	Percentage
Strongly Agree	1	0.82%
Agree	18	14.75%
Neutral	54	44.26%
Disagree	47	38.52%
Strongly Disagree	2	1.64%

iv.   Reduced flexibility

Reduced flexibility	Frequency	Percentage
Strongly Agree	10	8.13%
Agree	50	40.65%
Neutral	42	34.15%
Disagree	20	16.26%
Strongly Disagree	1	0.81%

v.   Data Security Risk

Data Security Risk	Frequency	Percentage
Strongly Agree	44	36.07%
Agree	40	32.79%
Neutral	29	23.77%
Disagree	7	5.74%
Strongly Disagree	2	1.64%

vi.   Limited IT experts

LIMITEDITEXPERTS1	Frequency	Percent
Stronger Agree	12	10.17%
Agree	10	8.47%
Neutral	32	27.12%
Disagree	48	40.68%
Strongly Disagree	16	13.56%

vii.   Poor Communication

Poor Communication	Frequency	Percent
Strongly Agree	7	5.74%
Agree	16	13.11%
Neutral	51	41.80%
Disagree	39	31.97%
Strongly Disagree	9	7.38%

viii.   Fear of job loss

Fear of job Loss	Frequency	Percent
Strongly Agree	35	28.46%
Agree	30	24.39%
Neutral	33	26.83%
Disagree	17	13.82%
Strongly Disagree	8	6.50%

ix. Loss of Control

Loss of Control	Frequency	Percent
Strongly Agree	34	28.33%
Agree	38	31.67%
Neutral	27	22.50%
Disagree	14	11.67%
Strongly Disagree	7	5.83%

C. PERFOMANCE TABULATION TABLES

Application & software development	Frequency	Percent
No	3	6.52%
Yes	43	93.48%
Total	46	100.00%
Application& software development	Frequency	Percent
No	6	20.69%
Yes	23	79.31%
Total	29	100.00%
Application & software development	Frequency	Percent
No	24	50.00%
Yes	24	50.00%
Total	48	100.00%

QUESTIONNAIRE

SECTION A

DEMOGRAPHIC DATA

1. What is your age bracket in years?

   ☐ 20- 25   ☐ 25- 35   ☐ 36 – 50   ☐ Over 50

2. For how many years have you worked?

   ☐ >1   ☐ 2-5   ☐ 5-10   ☐ Over 15

3. Which is your gender?

   ☐ Male   ☐ Female

4. What is your level of education?

   ☐ O-Level ☐ Diploma   ☐ Undergraduate   ☐ Post graduate   ☐ Doctorate

SECTION B

1. Has your organization outsourced any of the following ICT services?, based on the percentage of the service outsourced select either yes or no (Mark with X)

	SERVICE	Yes	No
i)	Help desk / support services		
ii)	Application/ software Development		
iii)	Internet Services		
iv)	Data Backup services		
v)	Network /Infrastructure		
vi)	Staff training (On IT issues)		
vii)	Printing services		
viii	Mailing system services		
	Add any other not listed above		
ix)			
x)			
xi)			
xii)			
xiii			

SECTION C

2. To what extend do you agree that outsourcing of the ICT services has **benefited** your organization (mark with an X) *(add any omitted in the blank space)*

	Effect	Non	Little	Moderate	Large	Very large
i.	Better trained staff					
ii.	Better helpdesk support					
iii.	Better Applications Development					
iv.	Better Internet service					
v.	Better data Backup					
vi.	Efficient support					
vii.	Improved Response time					
viii.	Reduced ICT costs					
ix.	Improved program implementation					
x.	Focus on key mandate					
xi.	Information benefits					
xii.	Strategic benefits					
xiii.	Communication benefits					
xiv.	More stability IT services					
xv.	Improved data security					
xvi.	Latest technologies					
xvii.	Efficient e-mail communication					
	Add any other not listed above					
xviii.						
xix.						
xx.						
xxi.						
xxii.						
xxiii.						
xxiv.						
xxv.						

SECTION D

3. To what extend are the following **challenges** experienced in regard to any of the outsourced ICT services? (mark with an X) *(add any omitted in the blank space)*

	Challenges	Non	Little	Moderate	Large	Very large
i)	Increased costs					
ii)	Delayed Response					
iii)	Poor Quality services					
iv)	Reduced flexibility					
v)	Data Security risk					
vi)	Limited IT experts					
vii)	Poor Communication					
viii)	Fear of job loss					
ix)	Loss of control					
Add any other not listed above						
x)						
xi)						
xii)						
xiii)						
xiv)						
xv)						
xvi)						
xvii						
xvii						
xix)						
xx)						

4. To what extend do you agree that outsourced ICT service can lead to the **challenges** listed below? (mark with an X) *(add any omitted in the blank space)*

	Challenges	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
i)	Increased costs					
ii	Delayed Response					
ii	Poor Quality services					
iv	Reduced flexibility					
v)	Data Security risk					
vi	Limited IT experts					
vi	Poor Communication					
vi	Fear of job loss					
ix	Loss of control					
Add any other not listed above						
x)						
xi						
xi						
xi						
xi						

SECTION E

5. To what level are your donor supported projects funded?

   ☐ Less than 30 %   ☐ 31% - 60 %   ☐ 61- 90 %   ☐ Over 90 %

6. What is your level of projects/ response to disasters in coverage in Kenya?

   ☐ Less than 30 %   ☐ 31%- 60%   ☐ 61-90 %   ☐ over 90 %

7. What percentage of your last one year's project(s) implemented as per plan?

   ☐ Less than 30 %   ☐ 31%- 60%   ☐ 61-90 %   ☐ over 90 %

8. How do you scale your organization's ICT operational costs?

   ☐ Low   ☐ Average   ☐ high   ☐ very High

9. Does your organization utilize the set budget fully as per the set budget lines?

   ☐ Less than 30 %   ☐ 31%- 60%   ☐ 61-90 %   ☐ over 90 %

ANNEX III

List of International Humanitarian Organizations Operating In Kenya

1. Action Against Hunger (AAH)
2. CARE
3. Caritas Internationalis
4. Catholic Relief Services (CRS - USCC)
5. Child Life International
6. Christian Aid
7. Danish Refugee Council
8. Doctors Without Borders
9. Emergency Nutrition Network (ENN)
10. Family Health International
11. Feed The Children
12. Food For The Hungry International (FHI)
13. Goal
14. Hunger Plus, Inc.
15. Interaction
16. International Committee of the Red Cross (ICRC)
17. International Federation of Red Cross and Red Crescent Societies (IFRC)
18. International Organization for Migration (IOM)
19. International Rescue Committee (IRC)
20. Lutheran World Federation
21. Mennonite Central Committee (MCC)
22. Mercy Corps (MC)
23. Oxfam
24. Refugees International
25. Relief International
26. Save the Children
27. World Vision International