AN INVESTIGATION INTO THE INFLUENCE OF CAREER PRACTICES ON EMPLOYMENT OPPORTUNITIES OF INFORMATION SCIENCE PROFESSIONALS IN MERU COUNTY, KENYA.

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A RESEARCH PROPOSAL SUBMITTED TO THE KENYA METHODIST UNIVERSITY IN PARTIAL FULFILLMENT FOR THE REQUIREMENTS OF AWARD OF MASTERS DEGREE IN INFORMATION SCIENCE

2017
DECLARATION

I declare this research proposal is my original work and has not been presented in any other university.

Signature ……… ............. Date .......... 8th March 2017 ..........

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This research proposal has been submitted for examination with our approval as university supervisors.

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Signature .................. DATE 13/3/2017 .....

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Signature .................. DATE 13/8/2017 .....

DEDICATION

I dedicate this proposal to my brothers, sisters, class colleagues and workmates who assisted and encouraged me tirelessly in the course of undertaking this research work.
ACKNOWLEDGEMENT

I wish to express my sincere gratitude to all my family and friends who have continued to assist me in many ways.

Special gratitude goes to my supervisors, Dr. Grace Irura and Ms. Catherine M Nzioka for their support, guidance and assistance in handling this proposal.

Utmost gratitude goes to the Lord Jesus Christ for giving me strength and wisdom which has been seeing me through this task.
**LIST OF ABBREVIATIONS**

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<thead>
<tr>
<th>Abbreviation</th>
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<tr>
<td>ALA</td>
<td>American Library Association</td>
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<td>ASIST</td>
<td>American Society of Information Science and Technology</td>
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<td>CUE</td>
<td>Commission for University Education</td>
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<td>Higher Education Institutions</td>
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<td>KeMU</td>
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<td>MUST</td>
<td>Meru University of Science and Technology</td>
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<tr>
<td>LIS</td>
<td>Library and Information Science</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENT

DECLARATION........................................................................................................................... ii

DEDICATION.......................................................................................................................... iii

ACKNOWLEDGEMENT........................................................................................................... iv

LIST OF ABBREVIATIONS ...................................................................................................... v

TABLE OF CONTENT ............................................................................................................... vi

ABSTRACT ............................................................................................................................. ix

CHAPTER ONE ........................................................................................................................... 1

INTRODUCTION AND BACKGROUND OF THE STUDY ...................................................... 1

1.1 Introduction ......................................................................................................................... 1

1.2 Background of the Study .................................................................................................... 2

1.3 Higher Education and the Information Sciences Profession ............................................ 5

1.4 Statement of the Problem .................................................................................................. 6

1.5 Aim of the Study ................................................................................................................ 10

1.6 Objectives of the Study .................................................................................................... 11

1.7 Research Questions ......................................................................................................... 11

1.8 Assumptions of the Study ............................................................................................... 12

1.9 Significance of the Study ............................................................................................... 12

1.10 Scope and Limitation of the Study ................................................................................ 13

CHAPTER TWO ..................................................................................................................... 16

LITERATURE REVIEW .......................................................................................................... 16

2.1 Introduction ......................................................................................................................... 16

2.2 Theoretical Framework ..................................................................................................... 16

2.2.1 Classical Theory of Employment ............................................................................... 16

2.2.2 Karl Brunner Theory of Employment and Unemployment ...................................... 18
APPENDIX I: Research Timetable............................................................................................. 57

APPENDIX II : Research Budget .......................................................................................... 72

APPENDIX II : Introduction Letter ...................................................................................... 74

APPENDIX III : Questionnaires ............................................................................................. 75
ABSTRACT

This research proposal comprises of an examination of the background of study, literature review and then research methodology. This research proposal is for a study to investigate the influence of career practices on employment opportunities for information science professionals in Meru County, Kenya.

The objective of the research of this study was to; - establish career opportunities for Information Science professionals, assess the level of awareness of the profession of Information Science in public and private establishments within Meru County, to examine the promotion of Information Science as an emerging profession in Meru County and lastly to recommend possible approaches that can be recommended in promoting employment opportunities for Information Science professionals in Meru County.

The conceptual framework depicts the independent variable and their relation with the dependent variable. The independent variables are:- Availability of jobs for Information Science professionals; Awareness of Information Science Profession by Employers; Promotion and marketing of the Information Science Profession; and Training and development of Information Science professionals. The dependent variable is employment opportunities. The researcher will carry out an exhaustive literature review. This will be done by reviewing what scholars and authorities have researched and written about in relation to the independent variables.

The researcher will use questionnaires to interrogate the sampled population out of the target population. Out of sampled population one hundred and eighty two 182 respondents, one hundred and twenty three (123) of them will be chosen for the study. Appendixes of research
timetable, budget, questionnaires and questionnaires schedules have also be included as part of this proposal.
CHAPTER ONE

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 Introduction

The 21st century is characterized by an information economy in which every social, economic and cultural aspects of the society is in one way or another driven by the access and utilization of information resources (Hilbert, 2015). The field of Information Science has continued to develop in line with the demands of the information society. With this advancement and growth, there has been a corresponding increase in the number of Information Science professionals.

Whereas the number of Information Science professionals is on the upward trend, just like in other professions, there is lack of corresponding growth in employment opportunities. This mismatch between the graduates and the available employment opportunities is a source of concern for the stakeholders. As noted by Afolabi and Ajayi (2009), the essence of education is for one to secure gainful employment upon attainment of necessary skills and capabilities.

While governments, private institutions and personal ventures through entrepreneurship can offer viable sources of employment for information professionals, there still exist gaps in the rate of employment of professionals in Information Sciences (Bowden, 2007). Thus, similar to other professions, lack of employment exists in the field of Information Sciences. This study will investigate the factors that determine the employment opportunities for Information Science professionals.

Information Science is a relatively new concept and profession which has been build and which relies on existing bodies of other social sciences. A number of definitions have been fronted for
Information Science. For instance, Saracevic (2009) defines Information Science as a discipline that investigates the properties and behavior of information, the forces governing the flow of information, and the means of processing information for optimum accessibility and usability. It is concerned with that body of knowledge relating to the origination, collection, organization, storage, retrieval, interpretation, transmission, transformation and utilization of information.

According to Ponzi and Koenig (2009) Knowledge Management (KM) can be seen as the newest approach in the field of information science. The cycle of information is that data is organized into information which when refined and given meaning and interrelations established gives knowledge. Koenig (2012) defines Knowledge Management as a discipline that promotes an integrated approach to identifying, capturing, evaluating, retrieving, and sharing all of an enterprise's information assets. These assets may include databases, documents, policies, procedures, and previously un-captured expertise and experience in individual workers.

1.2 Background of the Study

Universities and colleges are the main source of professionals in Information Sciences. Higher education in Kenya has been on the rise. As noted by Mutula (2002), university and tertiary education in Kenya has experienced growth since the colonial era. The first step towards the introduction and development of university education in Kenya was undertaken in 1961 when the then Royal College, Nairobi, was elevated to university college status. The University College entered into a special arrangement with the University of London, which enabled it to prepare students for degrees of the University of London. With the establishment of the University of East Africa in 1963, which coincided with Kenya’s independence from Britain, the Royal College became the University College, Nairobi. The other constituent colleges of the
University of East Africa were Makerere in Uganda and Dar-es-Salaam in Tanzania. Following Kenya’s independence, there followed a rapid expansion of the education sector with consequent heavy budget allocation to university education in order to develop adequate manpower base to enhance national development and provide solutions to such social problems as such diseases, poverty and illiteracy.

According to David (2001), since the mid-1980s there has been significant expansion of public universities in Kenya in response to high demand for university education. Among the existing public universities in Kenya are; the University of Nairobi, Kenyatta University, Egerton University, Moi University, Jomo Kenyatta University of Agriculture and Technology, Chuka University, Meru University, Jaramogi Oginga Odinga University, Masinde Muliro University among others. This number is however expected to grow with constituent colleges attaining the status of full-fledged universities.

The private sector has also contributed to the increased number of graduates into the labor market. Mutula (2002) argues that private universities in Kenya have emerged as viable options for acquiring higher education. He adds that such universities offer market-driven courses and provide a favorable environment for academic excellence. Most of them have modern infrastructure including libraries, information and communication technologies that are vital for academic excellence and research.

In addition, Mutula (2002) points out that the number of private universities has continued to grow with some of the full-fledged ones being: the University of Eastern Africa, Baraton, Catholic University of Eastern Africa, Daystar, United States International University (USIU), Africa Nazarene University, Kenya Methodist University, Strathmore and Kabarak University.
among others. This list is expected to continue to grow with institutions that have been operating with Interim Letters being issued with charters upon attainment of full-fledged universities’ status.

The Kenya governance is structured into two levels, the National government and the county governments. According to Nyanjom (2011) the Constitution of Kenya 2010 introduced the concept of political, administrative and fiscal devolution centered on geographical units known as the counties. This Constitution brought with it many significant changes in how the people of Kenya wanted to be governed.

According to Rimita (2011), Meru County, one of the 47 counties of Kenya, is located in the former Eastern Province. It (Meru County) is the home of the Ngaa People (Meru) ethnicity, with other inhabitants of different tribes and races. The county headquarters is in the town of Meru. Meru County can be traced way back to 1992, when the former Meru District was split into Meru Central District, Meru North District, Meru South District, and Tharaka District. In 1998, Tharaka District was again split into Nithi District and Tharaka District. However, in September 2009, a Supreme Court decision ruled that the split had been unconstitutional, and the first two of these were re-amalgamated into Meru District, which became Meru County in 2010 (Salim, 2011).

As noted by Rimita (2011), the devolved systems of government have ushered in a number of opportunities for employment through the creation of new vacancies, the allocation of fiscal resources such as Ward Development funds among others. Basing the research on Meru County, the researcher will investigate the factors that impede the access to employment opportunities for
Information Science professionals and recommend strategies that can be applied to rectify the current scenario.

### 1.3 Higher Education and the Information Sciences Profession

Kenyan universities and other training institutions such as tertiary colleges have been training increasing number of personnel at undergraduate level of degree, diplomas and certificates and at postgraduate levels of Masters and Doctorate qualification. The field of Information Sciences has not been an exception. Both private and public institutions are offering these programs and churning out increasingly large numbers of professionals in the field of information science (Bii and Rukwaro, 2015).

According to the Commission for University Education (CUE) website, notable colleges offering information diploma courses in Kenya are Sigalagala Technical Training Institute (Kakamega) and Kenya Science Teachers College. Though Moi University was the pioneer in Information Sciences’ teaching, other universities and institutions offering postgraduate studies in Information Sciences are Kenya Methodist University (KeMU), Kenyatta University (KU), Mount Kenya University (MKU), Chuka University, Kisii University and Technical University of Kenya. Of the above, the Kenya Science Teachers College, Chuka and Technical University offer undergraduate programmes while others have postgraduate programmes in addition to undergraduate. (Nzivo, 2012, pp. 110)

Despite the importance of engaging and employing knowledge, information, records and archives professionals in respective career openings, many of the information professionals still find difficulties in accessing these jobs (Kavulya, 2007). This can be attributed to the lack of
awareness of these professions by employees and Human Resource (HR) practitioners among other factors.

There has been enhancement of career and employment opportunities offered by the creation of institutions of higher learning in teaching and research. Other developments have created employment opportunities for professionals in Information Science and Management. This is noted by Kumar and Kumar (2014, pp. 471) who adds that these developments include the enhanced role of Information Communication Technologies (ICTs) and related technologies in the processing and management of information and the new constitutional and governance structures.

The new constitutional order in Kenya, as ushered in by the promulgation of the Constitution of Kenya (2010), brought with it a number of opportunities as a result of the creation of the county governments’ structures. For instance, new job opportunities have been offered in the various sections and departments as created in the county levels. Likewise, the constitutional bodies created under the new laws such as CAK (Communication Authority of Kenya), National Cohesion and Integration Commission (NCIC) and Independent Electoral and Boundaries Commission (IEBC) are also sources of employment. Despite the many opportunities offered by the new constitutional dispensation such as the county governance structures, public and private employers continue to engage and employ non-professionals to manage their information resources.

1.4 Statement of the Problem

Information Science is a relatively young but equally important profession in the current economy, which is the knowledge economy (Brinkley, 2011). This has made it a challenge for
employers to appreciate the Information Sciences’ professionals’ input. As noted by Carlo (2012), this can be attributed to factors such as lack of awareness among the Human Resources practitioners, inadequate promotion and marketing of the profession and the fear of embracing change in the workplace. Brinkley (2011) further observes that the career opportunities for Information Science professionals have been subject of investigation and study by practitioners and scholars. For instance, the pattern of Library and Information Science education in any country is shaped by a combination of circumstances. These factors, as observed by Tella (2009, pp. 149), include “the nature of the country’s library service; the structure of tertiary education; the system of government; and the professional organizations which librarians themselves have formed”.

Information Science professionals are best suited to manage information resources and related managerial tasks. As noted by Sinha (2006), Information Science professionals are the foundations for effective and efficient delivery of library and information services as it is with other professions. Planning for the future supply of this cadre of staff and adequate utilization of the present manpower often depends on a thorough knowledge of the characteristics of the existing professionals.

Regionally, the employment opportunities for information professionals are a subject of research by scholars. For instance, Afolabi (2005) observes that Library and Information Science graduates should think of going into the private sector. This is just one of the approaches of ensuring the creation of job opportunities for Information Science professionals. Other possible ways of securing employment include setting up of information-based entrepreneurship ventures. For instance, Afolabi (2005) lists the basic requirements for setting up a fee-based information
service which includes; an office (although one could operate some of them from one’s home), letterheads, business cards, brochures, office equipment such as a stationery and furniture.

As noted by Issa (2010), modern societies have become largely dependent on information as their existence is hinged on the availability, unhindered accessibility and intelligent use of information. There is growing demand for Information Science skills in the Sub-Saharan Africa. As observed by Igbinoba (2010), some of the reasons advanced for the growing needs to promote library education in Nigeria include the demand for trained and professional librarians, libraries with large buildings and growing collections which required expert management. The increase in the world population and literacy required more libraries and qualified librarians to man them and trained manpower is required for the complex and scientific nature of library operations. ICTs are the major drivers in the information sector at all the stages of handling of information. According to Angelo et al (2007), present and future librarians are thus expected to explore and exploit the use of information and communication technologies (ICT) for modern library practice.

The Kenya’s challenges with career opportunities for Information Sciences can be traced and related to the general employment scenario in the country (Burnett, 2013). Successive governments come into power with impressive manifestos on reduction of unemployment with most emphasis being laid on the youth. For instance, the Jubilee Coalition Government Manifesto (2012) seeks to create one million jobs. While employment opportunities may be scarce, other channels of securing jobs may be the impediments to the creation careers. For instance, information entrepreneurship may be a source of employment to information professionals. The realization and implementation of jobs may not be realized due to other
constraints. Likewise, with the existence of so many choices within any profession recently, change of careers has become very common in many professions. This is the trend as persons seek to adapt to their social and economic circumstances in a highly technological age. While investments have been made to train and equip people with skills in information management, there still is a slow appreciation and uptake of these professionals to run organizations and departments mandated with information management (Schostak et al, 2010).

Employment opportunities for Information Science professionals like any other careers are influenced by modern development in social, cultural and technological environment. Issa (2005) notes that to effectively and constantly provide for these needs, trained personnel with vision, technical expertise and managerial ability are required; such caliber as could design and operate systems relating to the collection, management, dissemination and interpretation of information with the accompanying technologies. Abdulwahab and Olanrewaju (2010) argues that certain changes have affected and shaped the present library environments manifested in the forms of “users’ needs, information resources, and communication technology”. This can be explained by the adaptation of Information and Communication Technologies (ICT’s) in libraries which has resulted in the radical transformation of the role of Information Professionals and services and products provided by institutions.

Moreover, Edem (2009 pp. 83) observes that career advancement prospects rank high in the order of importance to every enthusiastic person when they enter a profession. This is so because the new entrant may be looking for upward mobility in his/her chosen profession or career. Opportunities for career advancement must be sought for and be known, or explained to such new staff. To some personnel, the future prospects available for job mobility must be seriously
examined at the beginning. To some scholars, career advancement is tied or related to merit, whereas to some it is related to seniority.

Career advancement prospects, if made known to Information Professionals, would assist them in meeting their developmental needs and aspirations, as well as realizing their optimal potential. Though Kenyan institutions have been producing sizeable number of professionals in Information Science, the absorption of the same into the relevant labor segments of the economy is wanting (Rukwaro and Bii, 2016). For instance, in Meru County, there are institutions such as banks, universities, the Meru County government and national government ministries and agencies all of which have functions and sections tasked with the management of information related resources. However, the emphasis and recognition of the need to recruit personnel with specific academic and professional qualifications in Information Sciences is hampered as few or none of such departments have staff with training in Information Sciences. The resulting effect of this is professionals in fields such as business administration take up jobs that could have been secured by Information Science trainees (Tumuhairwe, 2013). This inability to recruit, train and develop trained professionals in Information Sciences by employers in Meru County is what the current research will endeavor to investigate and give the appropriate recommendations.

1.5 Aim of the Study

The aim of the study is to investigate the influence of career practices on employment opportunities for Information Science professionals in Meru County, Kenya, in order to determine various approaches of mitigation to enhance the ability of the Information Science professionals to secure job opportunities.
1.6 Objectives of the Study

The objectives of this research are to:

1) Examine the career opportunities for Information Science professionals in Meru County.
2) Find out the level of awareness of the Information Science profession in public and private establishments within Meru County.
3) Examine the promotion of Information Science as an emerging profession in Meru County.
4) Determine the level of training for Information Science professionals in Meru County.
5) Recommend possible approaches that can be used to promote employment opportunities for Information Science professionals in Meru County.

1.7 Research Questions

The study will be guided by the following research questions:

1) What are the available career opportunities for Information Science professionals in Meru County?
2) What is the extent of awareness of the Information Science profession by both private and public employers in Meru County?
3) What strategies have been put in place towards promoting Information Science as an emerging profession in Meru County?
4) What levels of training have various Information Science professionals in Meru County attained?
5) Which possible approaches can be applied in promoting employment opportunities for
Information Science professionals in Meru County?

1.8 Assumptions of the Study

The study will be based on the following assumptions:-

1) The sourcing, recruitment and employment of Information Science professionals is critical in the business functions of organizations and institutions.

2) Professional management of information resources underpins the success of the administrative, research, training and litigation processes in organizations and institutions.

3) Training, promotion and awareness of Information Science professionals impact on their employability by prospective organizations and institutions.

1.9 Significance of the Study

It is expected that the study will be useful in the extension of knowledge. The research findings will be useful in assessing the strength and weaknesses of tools, curriculum and resources at the disposal of training information professionals. The study findings will also be expected to improve and inform the development of curriculum for training information professionals.

The professionals in Information Science will find this study crucial in preparing for the job market through sourcing for employment and engaging in information related entrepreneurship ventures. Administrators, managers and human resources practitioners will find this study crucial in sourcing, appraising and developing Information Science(s) staff in public and private organizations. Organizations and institutions will find this study useful in enabling them appreciate the opportunities and managerial abilities that can be accrued from enlisting and employing professionals in managing their information resources.
The research will also form a basis for further research on how to enhance Information Science professional’s capacity in accessing job opportunities in the market. This should lead to the generation of new ideas for promotion, awareness creation and utilization of Information skills for organization’s competitiveness and growth.

1.10 Scope and Limitation of the Study

This study on employment opportunities and career development of Information Science Professionals will be conducted in Meru County, Eastern Kenya. Although the study will have an in-depth investigation on the profession of Information Science, it is focused on the factors determining jobs opportunities for professionals in this field. The expected period of study is from September 2015 up to May 2017. The study will be limited to the profession of information science. The sample to be used will be the students, the academia, staff and management of selected academic institutions.

Some of the respondents may not fully cooperate citing fears that data may be misapplied or even demanding inducements for filling Questionnaires. Rough terrain and extreme weather conditions may also compromise the access to the respondents. To address this, the research will engage research assistants and allocate more research time in collecting data. Senior managers who make strategic decision may also be unwilling to divulge sensitive information. To address this, the researcher will approach the senior management with assurance of confidentiality of the information divulged. Few stakeholders, more so employees, do not fully appreciate and comprehend the new role and functions of Information Science in the daily social, cultural, economic and political facets of the society. Hence, more time will be needed to explain to them
further and in detail. The research will thus take more time to explain to the respondents the
concepts and how it determines the daily operations of business and organization.
DEFINITION OF TERMS

Employment

In this research project, the researcher defines employment as a condition where a person with the right set of skills is able to gainfully source and secure employment opportunity that can sustain his/her livelihood.

Human Resource Management

In this study, the researcher will adopt the definition by Watson (2010) who defines HRM in the perspective of resources and defines it as “the managerial utilization of the efforts, knowledge, capabilities and committed behaviors which people contribute to an authoritatively co-ordinate human enterprise as part of an employment exchange (or more temporary contractual arrangement) to carry out work tasks in a way which enables the enterprise to continue into the future.

Information Science Profession

In the undertaking of this research, information science will be defined as a multidisciplinary field of study, involving several forms of information, given coherence by a focus on the central concept of human, recorded information, and which encompasses several other disciplines.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of documented literature on career opportunities, awareness, promotion and marketing, training and development for Information Science professionals. This chapter also discusses the theoretical framework adopted for the undertaking of this research.

Abbott and Kennedy (2008) define literature review as the process of locating, obtaining and evaluating the research literature in one’s area of interest. According to David and Penny (2016) literature review is an evaluative report of studies found in the literature related the selected area. The literature review should describe, summarize, evaluate and clarify the literature. Going by the definitions of literature review above and for the purpose of this research, the researcher will define literature review as a summary of scholarly and other related literature on the topics of employment, awareness, marketing and promotion, and training and development of Information Science professionals.

2.2 Theoretical Framework

This section explores theories governing employment and unemployment in the society. The researcher will consider two theories of employment; the classical theory of employment and Karl Brunner theory of employment and unemployment.

2.2.1 Classical Theory of Employment

This study is formulated around The Classical Theory of Employment by Keynes (1936). This was advanced by the classical economist who believed in the existence of full employment in the
economy. According to Keynes, full employment is a normal situation and any deviation from this regarded as something abnormal. The classical theory posits that unemployment results from the rigidity in the wage structure and interference in the working of free market system in the form of trade union legislation, minimum wage legislation among others.

The Classical Theory of Employment argues that full employment exists when everybody who at the running rate of wages wishes to be employed. The formulator of this theory points out that this exists when people are voluntarily unemployed since they can’t work on the current wages though they are prepared to work at the current wage rate but they do not find work.

This theory posits that employment is a means wage labor, the hire of labor for a sum of money, and not merely occupation or self-employment. This implies that the Classical Theory of Employment is a theory of the decisions of employers to hire labor and of employees to offer their services. This theory is vital in relating employment and the labor market. As noted by Keynes (1936), the classical theory of employment is necessary in order to explain how unemployment can arise from a lack of aggregate demand. Skills and training is also a factor discussed under the Classical Theory of employment. The theory takes ‘the skill and quantity of available labor’ as one of its initial conditions and does not consider the weighty question of why a wage-dependent labor force exists.

According to the Classical Theory, unemployment results from the rigidity in the wage structure and interference in the working of free market system in the form of trade union legislation, minimum wage legislation among others. Full employment exists “when everybody who at the running rate of wages wishes to be employed.” However, the classical theory is based on a number of assumptions such as that; labor is homogenous, there is perfect competition in the
labor market and the labor economy is closed from external trade (Jain and Khanna, 2011, pp. 64-67).

2.2.2 Karl Brunner Theory of Employment and Unemployment

The theory of employment and unemployment was advanced by Karl Brunner and Allan Meltzer in the year 1978. The two argue that Classical and other theories of employment and unemployment start from a common framework. According to this theory, there is a single composite good, output, produced under conditions of diminishing returns to each scarce factor of production and constant returns to scale. The two scholars explain that the conditions governing production are described by a production function, and the demand for labor is derived from this function. In this theory, the supply of labor is based on individual decisions to give up other activities, namely leisure and time allocated to labor (Karl and Meitzer, 2010, pp. 44-48).

As a result, the relation among the above functions yield a negatively sloped aggregate demand curve for labor relating offers of employment and the relative price of labor, or real wage, and a positively sloped supply curve of labor. From the theory, Brunner and Meltzer came up with two definitions for unemployment. They defined unemployment as the difference between the levels of employment secured versus the demand of jobs.

2.3 Empirical Literature Review

2.3.1 Available Career Opportunities for Information Science Professionals

Information Science profession is gaining prominence as a profession in the modern society (Kanwal, 2011). Aleksander (2014) explains that this is as a result of the emphasis of
information and knowledge as the drivers of social and economic development. Different economies are driven and dictated by varying inputs. The 21st dynamic global economy is characterized by globalization. As noted by Hofer-Alfeis (2012), information is viewed as a key strategic and competitive resource by organizations and is critical to individual and business success. In the modern society, information is increasingly being recognized as a major resource in the restructuring and growth of many economies in the world.

There are generally accepted modalities and approaches in the labor markets that tend to inform the job market trends. For instance, as noted by Deborah, Kay and Lindsay (2009), concerns about employment practices and opportunities are gaining prevalence as an accepted means of staffing in organizations, mainly due to the demands of employers for labour flexibility, the existence of temporary work agencies to supply labour, and the desire of some employees for varied work experiences.

A number of job openings exist for trainees and professionals in the broader field of Information Science. Buckland (2015) notes that this can be viewed from the various areas of specialization such as Library Science, Records and Archives Management, Publishing and Book trade, Information Communication Technology among others. For instance, the Rutger University School of Communication and Information’s website gives a breakdown of career opportunities for information Professionals, namely: librarianship, information communication technology, researchers and research assistants, archivist and records managers cartographic information specialists, book publishing and book trade and teaching.

Moreover, Ahmad (2009) notes that the tasks and responsibilities undertaken by information science professionals can also vary according to their domains of specialty. Job description of
Information Science professionals can be traced in the lifecycle of information (from creation, processing, storage and dissemination). Knowledge and information management involves the creation, sharing, validation, utilization, and management of tacit and explicit organizational knowledge through “harnessing of people, processes, and technologies” (Thite, 2004, p. 28). The diversity of information trainees skills also tend to offer them an added advantage in the job market and consequently in their professional development. Horwitz et al (2006), observes that knowledge and information workers are autonomous people who enjoy occupational advancement and mobility and resist command and control culture.

Olden and Mchanzaro (2009; p. 119) notes that in order to secure job opportunities, Information Science professionals need to be recognizable by potential employers on the basis of the roles, abilities and skills they are bound to bring on board once recruited. Information and knowledge managers play a key role in the management of knowledge. With the existing realities of information and knowledge economies, organizations are appreciating the value of information professionals. Modern organizations are concerned with the capture, use and storage of knowledge. Organizations have attempted to transform themselves into knowledge-enabled operations that are able to tap into the intellectual capital they create, to help them learn and develop (Hughes, 2003 pp. 5-8).

The roles and functions of information professionals are diverse in nature. Moore (1996) argues that the role of the modern information science professional would become one of “creator, communicator and consolidator”. For instance this is a requirement for records manager, but much more is required in the contemporary records management facet of Information Sciences. Moreover, the skills by Information Science professionals also need to be in tandem with technological developments if they are to be efficient and effective in the delivery of their duties.
and responsibilities. This was noted by Negara (2003), who also observed that the challenges and opportunities facing the records manager require a wider skillset than the ability to write a file plan or retention schedule, or organize a clear-desk event.

According to Okojie and Omotoso (2013), Information Science is a multi-disciplinary and multi-dimensional profession of the 21st Century in which the training of Information Science professionals is harmonized giving the trainees the ability to deliver in more than one facet of the profession. This equips them with skills and competencies that enable trainees specializing in one branch of Information Science to work in another. As noted by Abell and Oxbrow (2001), there is significant overlap between the core competencies required by records managers, librarians, IT professionals among others. The latter have been very well researched and documented.

The trend towards the need to recruit Information Professionals by organizations has been given impetus by the transition from industrial to information and knowledge societies and economies. According Kanwal (2001), the transformation from the industrial revolution to the digital era is on its way and no one knows where it would lead. The transition from the industrial to information and/or knowledge societies has seen Information and Communication Technologies (ICTs) play a key role through their adoption and usage. A case in point is where change has been used to define the history of libraries in terms of service. Haider (2007, p. 274) writes: “[since 1970s] the pace of organizational life has accelerated, and the rapidity of the technological change often exceeds the ability of organizations to absorb these technologies in ways that are not at least temporarily destabilizing”
Career and employment opportunities have their foundation on the individual education and training background. Thus education as a way of improving ones standards of living continues to receive prominence both at the individual level and the level of policy makers such as governments. For instance, Higher education has experienced massive expansion in terms of student enrolments and the emergence of new kinds of providers (Shah and Jarzabkowski, 2013).

Lee (2007) observes that a career is usually characterized as developing over a period of years and involving progressively more responsible roles within an organization or the profession at large. As noted by Kanwal (2001), there are concerns worldwide that existing undergraduate programmes are not producing graduates with the kinds of lifelong learning skills and professional skills which they need to be successful in their professions. According to Aycan and Fikret-Pasa (2003) there are varied factors that influence students' career choice namely:- intrinsic (interest in the job, personally satisfying work); extrinsic (availability of jobs, well-paying occupations); and interpersonal (influence of parents and significant others).

Training as offered by universities and colleges form the basis upon which Information Science professionals get skills and competencies to successfully undertake their duties and responsibilities. As noted by Adio and Popoola (2010) the role of a university is to “impart knowledge, conduct research, and provide services to the community”. They further state that “university is preeminently a knowledge institution, which produces knowledge in many areas in the form of skill, research and credential”.

According to Cossham and Fields (2011), professionals are frequently faced with challenges of improving their standing and relevance and no professional degree program in the world can impart the learning to be sufficient forever. Cossham (2011) further notes that in order to keep
professional knowledge dated, learning must remain continued and continuing professional development (CPD) is the responsibility of both individuals and their employers.

Gati and Saka (2001) developed a model to explain factors that determine career opportunities in general. They came up with three difficulties that can be experienced in seeking employment opportunities namely: lack of readiness by the job-seekers in taking up the available job opportunities; lack of Information by the job seekers on the available vacancies; and lastly job-seekers having inconsistent information pertaining the available jobs and employment prospects.

A number of approaches can be used to promote employment opportunities for Information Science professionals in Meru County. For instance, Fitzgibbons (2014) considers creation of professional organizations, networking and advancing legislative drives as key ways in advancing employment opportunities for professionals. Butterworth (2006) also addressed this issue and proposes that on-job support and benchmarking quality will increase employability of information science professionals.

2.3.2 Awareness of Information Science Profession by Employers

Career and employment awareness forms vital part of one’s of career management strategies. Career awareness strategy is defined as a dynamic process in which individuals gather information on their own likes, dislikes, strengths, weaknesses, and on the world of work. It also involves developing realistic career goals; developing and implementing strategies to achieve these goals; and obtaining feedback to promote career decision making (Bebeng, 2007).

For employers to be aware and willing to engage the services of employees, the element of employability may arise. Knight and Yorke (2013) defines employability as a set of
achievements, understandings and personal attributes that make an individual more likely to gain employment and be successful in their chosen occupations. Potential employers have common traits and skills that they look for when making decisions on recruitment of employees. As observed by Harvey et al (2014), most employers are looking for graduates who are proactive, can use higher level skills including ‘analysis, critique, synthesis and multilayered communication to facilitate innovative teamwork in catalyzing the transformation of their organization’.

The creation of awareness of a profession among potential employers is critical thus there is need to device different approaches for employers to embrace the Information Science profession. For instance, this can be accomplished through advocacy professional bodies. For instance, according to the American Library Association (ALA), the American Society for Information Science and Technology (ASIST) is one such important body that aims to provide methods of communication and continuing education for information professionals encourage research and development in the field of Information Science and increase public awareness of the Information Science field. Locally, according to the Kenya Library Association (KLA) website, one of its objectives is to “Promote professional competencies for improved socio-economic development of the nation”.

Employers also need to be sure that their prospective employees match the expectations of the duties and responsibilities of the job. According to Harvey (2010) et al, most employers are looking for graduates who are proactive, can use higher level skills including ‘analysis, critique, synthesis and multi layered communication to facilitate innovative teamwork in catalyzing the transformation of their organization’.
Profession’s awareness may be hindered by organizational culture and politics that in turn determine the management decisions on the skills and competencies they need for an Information Management staff. As noted by Armstrong (2009), organizational culture is a key determinant in the access of employment and career opportunities. This goes beyond the securing of employment by a profession and determines their professional and career development. For instance, Kanwal (2011), vested political interests’ make libraries suffer as the funding priorities and support for them might change with the political change at the higher level. Libraries face the challenge of growth due to lack of consistency in aims and policies of various governments, higher authorities, and bureaucracy. It may result in the discontinuation of any development plans including ICT adoption. He further points out that these factors “significantly affects the working environment of libraries: from recruitment of professionals to the delivery of services” and that “Challenges ahead can be met only through the sustainability in policies, constant support of authorities and supremacy of merit at every level instead of vested interests”, Orna (2010:13) notes that organizational policies and politics determine whether the management and stakeholders are aware of, recruit, employ and develop particular professionals as opposed to others, information specialists being no exception. Besides this, the different stakeholders in the profession need to get involved in strategic formulation towards making the job market embrace the trainees in Information Science.

The working environment is a key determinant in creating employer awareness of a particular profession and enabling professionals in securing an employment opportunity and subsequent career and professional development of a professional. As noted by Kanwal (2010), there are scenarios where the work environment helps to advance the professional development of an individual and a profession as a whole, such as where career advancement is supported by
budgetary allocations. He further observes that lack of following factors significantly affects professionals' level of motivation, namely; professional visibility; delegation of authority; appreciation; sufficient financial and other benefits; growth opportunities; and proper work place conditions.

2.3.3 Marketing and Promotion of Information Science Profession

As an emerging occupation and a service, information management profession requires marketing and promotion. According to Ocholla (2013), market forces increasingly determine the nature and types of products and services that are delivered to consumers across all sectors, and Library and Information Science (LIS) job market is no different as it largely determines the type of skills, knowledge and abilities that the LIS student must possess and project after leaving LIS Higher Education Institutions (HEIs). According to this view, marketing and promotion of Information Science as a profession is vital as a tool of creating employee appreciation of the value of the profession.

The labor market is changing rapidly due to factors such as varying demographics and disruptive technologies and innovations such as digital libraries. According to Ocholla (2007), the field of Information Science is changing rapidly, with the emerging professions taking a significant portion of the market in countries where the job market increasingly previous relied on non-library employers. In this regard, there is need to undertake marketing of the profession, more so a developing one like Information sciences.

Marketing of a profession can be conceptualized in relation to the practice of human resources management. Researchers have written on marketing and promotion of careers and professions in general and in particular the information science profession. According to Armstrong (2009) marketing is important in the HR function as it is necessary to understand the needs of the
business and its critical success factors such as: where the business is going, how it intends to get there and what are the things that are going to make the difference between success and failure.

The data accrued from the above process informs the kind of personnel and their skills and competencies to drive the business agenda. According to Samuel (2008), the marketing and promotion of a profession will aid organization in establishing the cost elements and organization benefits for introducing and maintaining these professionals.

In marketing a profession, the aim is geared towards persuading the management that it is an occupation whose service(s) the business needs. According to Armstrong (2009), this means making out the business case by justifying the profession’s added value and the impact it will make on the performance of the business by indicating the financial benefits. Thus, every effort must be made to quantify these benefits in financial term.

More generally, marketing and promotion of professions is a crucial function in networking the professionals to prospective employers. For instance Hughes (2003) notes that marketing the services of the records management occupation is an important way to demonstrate its role in success of business and to raise awareness of services of the services offered. Through marketing of a profession, the players also get to keep abreast with contemporary developments in the field. Ocholla (2013) notes that it is through marketing and promotion that professionals keep abreast with the new developments and get better positioned to implement international standards thus raising the profile of the field of records management, while showing its direct and tangible benefit to the organization. Contemporary issues should be given prominence when promoting a profession. According to Shepherd and Yeo (2013), marketing of the information profession in this way is an important means of increasing education and adoption of the information
management policy and process, and demonstrating the role of the information manager and the interface with others.

The promotion of an occupation borrows a lot from the business plan of an organization. For instance, De Saez (2010) notes that marketing and promotion of information management profession begins with a business marketing plan. It is however notable that organizational politics have a bearing on the success or otherwise of the promotion of the profession. As observed by Goodman and Diers (2001), in addition to planning targeted events, communications and presentations contribute to marketing the records management profession, learning how to play the politics of the organization may also be a useful tactic in order to achieve senior management buy in and high level attention. They add that it is vital to understand how the organization works and to network with fellow employees. As can be deduced from the above, while marketing and promoting the Information Science, there is need for a well-grounded understanding of the various potential employers.

Employers engage the services of employees to benefit from their skills and competencies to drive to goals and objectives of the organization. As noted by Adams (2010), the ultimate end at which jobs and or managerial policies of an organization are designed, they are done in such a way that employers derive maximum benefits from the services offered by the employees. Additionally, Noble et al (2010) observed that marketing and promotion of a profession is vital to potential employees as it increases their visibility in the job market and improves one’s career prospects. Munjuri (2011) notes that “career advancement prospects rank high in the order of importance to every enthusiastic person when they enter a profession. He explains that this is so because the new entrant may be looking for upward mobility in his/her chosen profession or career. De Saez (2010) explains that it is through a supportive marketing of a profession that
these opportunities for career advancement can be sought for and be known, or explained to, such new staff.

An occupation’s marketing and promotion by stakeholders help professionals to exploit their ability to the maximum. As noted by Munjuri (2011) career advancement prospects, if made known to newly employed librarians, would assist them in meeting their developmental needs and aspirations, as well as realizing their optimal potential. He further notes that young entrants into the library profession with a good first degree in any discipline or library science should be encouraged to rise in the profession through in-service programmes, networking and promotion.

2.3.4 Training and Development of Information Science Professionals

The quality of training and development of any professionals is important in ensuring their marketability and competitiveness in the job market. As noted by Sirdhar (2010), in addition to information management training, Information Professionals are expected to have some knowledge in the areas of management, statistics, and computers among others. Sihna and Pandey (2014) adds that new professionals of e-world of 21st century need to have not only knowledge and skills in the area of Information Technology (IT) but also matching will “to carry out the services in the new media and means”. This calls for training of Information Science professionals using enriched curriculum that promotes the acquisition of modern technologies that drive their services’ delivery.

Adequate training and development for Information Science professionals enables them to be market-ready. Shepherd (2013) notes that with adequate training, prospective employees can gain skills and competencies required in carrying out a particular task and be able to articulate how the same can be utilized to assist companies and institutions increase and sustain growth. Training is however a shared role between employees and employers. Kumar and Kumar (2014)
argues that both employees and employers should exercise the element of flexibility in order to promote chances of staffs’ professional and career development through on-work training. Additionally, Nair, Patil and Mertova (2011) argues that through this aspect of flexibility, new kinds and modes of education and training delivery, such as workshops and study leaves, can be exploited. Trainees from colleges and universities lack hands-on work experience. As noted by Chell and Yusof (2010), there is need to assess the quality of graduates based on feedback from employers and industry bodies representing different professions. Training and orientation is vital in positioning trainees to effectively and efficiently deliver in the workplace. Kumar and Kumar (2014), states that any significant gap between the knowledge and corresponding work-based skills required is dangerous. This necessitates the training of personnel to handle particular jobs that requires specific requirements. For instance, according to Ibrahim (2001), education for librarianship emanated out of a concern to develop an ideal profession to provide practitioners with appropriate working frameworks.

The pattern of library and information science education in any country is shaped by a combination of circumstances, which according to Kargbo (1999, pp. 97-103) include “the nature of the country’s library service; the structure of tertiary education; the system of government; and the professional organizations which librarians themselves have formed”. Thus, one of the most important factors responsible for the development of any profession is the system of educating its initiates into the field.

Another necessity and key component in training of information professionals is ICTs. According to Ocholla (2006) Information technology has become a fashion, a savior and a threat to information professionals. He further adds that confidence in those handling it has to be built if it is to be of any use. The people handling the information technology need the knowledge,
skills and attitudes that can help them face the challenging and yet pleasant experiences of working with information technology. In attaining staff development and training, investment from stakeholders is crucial. Human resource development literature suggests that investments in training and development are associated with a range of individual and organizational benefits (Buckley and Caple, 2007).

There is need to design training programmes in line with the work needs of the personnel. Training outcomes are more likely to have a positive effect on employee attitudes where training designs are structured and related to employees work (Heyes and Stuart, 1996). The trainees also play major role on the impact of the training and specifically the individual characteristics of the trainees. A wide variety of trainee characteristics are likely to impact the effectiveness of training. Noe (1986) identifies personality and motivational factors and develops an expectancy model that hypothesizes the process by which trainees' attitudes concerning their jobs and careers and their perception of the work environment influence training outcomes. There are several individual characteristics that affect the transfer of training process. Some of these characteristics include cognitive ability, conscientiousness, achievement motivation, motivation to learn and to transfer, anxiety, and self-efficacy (Colquitt et al., 2000).

Work environment is also crucial in determining the development of professionals in any field. As noted by Dirani (2012), work settings nowadays demand flexibility, communication skills, and teamwork. Helping trainees to achieve these goals is complicated by the fact that trainees come from different background environments, and bring to the training their individual values and beliefs, and their personal experiences to bear, share, reflect and learn while simultaneously working together on a challenging yet unfamiliar task (Cogner, 1992).
2.4 Conceptual Framework

Conceptual framework can be defined as a set of broad idea and principles taken from the relevant fields of enquiries and used to structure a subsequent presentation (Kombo and Tromp, 2006). Miles and Huberman (2010) defined conceptual framework as a visual or written product that graphically or narratively explains the main things to be studied, namely the key factors, concepts, or variables and the presumed relationships among them. It is a research tool intended to assist a researcher to develop awareness and understanding of the situation under investigation. The major variables to be discourse under this study are namely:-

1) Availability of jobs for Information Science professionals.

2) Awareness of Information Science profession by employers.

3) Marketing and Promotion of the Information Science profession.

4) Training and development of Information Science professionals.
These will be considered as independent variables and analyzed in relation to how they affect the access to career and employment opportunities of Information Science professionals in Meru County. In the conceptual framework above, various variables determine the employment opportunities for information science’s professionals. These determinants are available employment opportunities for Information Science specialists; the level of awareness of
Information Science profession by employers; marketing and Promotion of Information Science profession and; training and development of Information Science professionals.

2.4.1 Availability of jobs for Information Science Professionals

In the conceptual framework above, the availability of employment opportunities for Information Science professionals is seen as a determinant for the Information Science specialists to gain employment. According to Afolabi (2009), different job variants are available for Information Science trainees and professionals to pursue, including active practice in direct and salaried employment and through entrepreneurship. However, Olaka, (2008) notes that Availability of jobs is the effect of chances acting independently to ensure that trainees in a particular field or specialty gain gainful employment. This is so because it is through available job openings that they can be absorbed into the job market.

2.4.2 Awareness of Information Science Profession by employers

The awareness of the Information Science professions and its facets of specialization are also seen as a determinant of the employment of Information Science professionals as it’s crucial in enabling the potential employers to be informed of their existence. The awareness of particular set of skills of potential employee by decision makers in employment is a vital aspect when recruitment processes are being undertaken (Treptow and James, 2011, p. 64). This has been supported by Onunga (2001) who notes that awareness of library and librarian skills by employees and policy makers is vital in increasing the visibility of the profession.
2.4.3 Promotion and marketing of the Information Science profession

Marketing and promotion of the Information Science profession increases the employability of these specialists as it creates the perceived need for these professionals as it provides channels of connecting employers and employees. There are different marketing and promotional mechanisms for professions which can involve conferences, professional bodies’ formation and running and career forums. Each type of promotion is applicable in differing scenarios (Monnapa, 2009). There is however need to link potential employers and employees. This has been noted by Kavulya (2007), who argues that marketing of Information Science professions is vital in establishing linkages between trainees and potential employers.

2.4.4 Training and development of Information Science professionals

Lastly, the quality of training and development of Information Science professionals determines their chances of securing job opportunities through acquisition of relevant skills and competencies. As noted by Aubrey (2014 pp. 571-588), training and skills development for Information Science professionals positions them in a vantage point to secure job and employment opportunities through enrichment of their qualifications and skills. Regional scholars have also weighed in on the impact of training and development of Information Science professionals on their employment opportunities. For instance, Yesufu (2000) asserted that the training of personnel enhances productivity. He added that education and training are generally indicated to be the most important direct means of upgrading human intellect and skills.
2.5 Chapter Summary

In consideration of the importance of securing, maintaining and improving on one’s employment for his/her personal and professional development, there’s in need to be equipped with necessary information about the job market. This is more important in the face of the rapid technological development and the global economy. There are also corresponding challenges that expose professionals to the risks of unemployment, such as financial challenges and organizational restructuring, automation and downsizing. For instance, as noted by Nonthacumjane (2010), today’s environmental pressures are forcing libraries to focus on accelerating technology, innovation, technical complexities, social and legal issues, cost, risk, competence, skills of staff and technology itself.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology to be used in the study. It presents discussions on the research design, research population, sampling, data collection instruments and data presentation, analysis and interpretation.

3.2 Research Design

Kothari (2010) describes research design as the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance of the research purpose with economy in procedure. Therefore, in this research proposal, research design is the conceptual structure within which research is conducted; it constitutes the blueprint for collection, measurement and analysis of data.

The study will adopt a descriptive survey design in seeking to establish how selected career practices determine employment opportunities of Information Science professionals in Meru County, Kenya. This is a form of descriptive research method. Descriptive research seeks to establish the status of affairs without manipulating the study variables (Graveter and Forzzano, 2006) while a descriptive survey is undertaken with the aim of describing characteristics of variables in a situation (Best and Khan, 2005). The researcher data to be collected by the researcher will be both qualitative and quantitative. As noted by Lewin and Somek (2011) the use of a survey method by researchers offers the ability to obtain information that describes existing phenomena from a small proportion of that population to represent the views of the
entire population through studying the individuals’ perception, attitude and behavior. In a survey design, information is collected from respondents about their experiences and opinions about a particular topic under study in order to generalize the findings to the population that the sample is intended to represent (Borg and Gall (2003), p. 549).

Descriptive survey design is deemed appropriate for the study since the target population is diverse and it will allow the researcher to collect data from the target population by administering questionnaires which will capture different aspects of the selected career strategies that influence employment opportunities for Information Science professionals. Since this study seeks to obtain descriptive and self-reported information from the respondents on the influence of career practices on employment opportunities of Information Science professionals in Meru County, Kenya, the survey design will thus be the most appropriate.

3.3 Study Area

The research will be undertaken in Meru County, eastern region, Kenya. Meru County is one of the forty seven (47) counties of Kenya, located in the former Eastern Province. The researcher will conduct the investigation in three institutions of higher learning. One of the three institutions that will be surveyed is the Kenya Methodist University (KeMU). KeMU website describes the institution as a chartered Christian university, with the main campus situated in Meru and campuses at Nairobi, Mombasa, Nyeri, and Nakuru. This study will consider the Main Campus in Meru. According to its webpage, Meru University of Science and Technology (MUST) is a public university near Meru, Kenya. It is situated in Nchiru, 15 kilometres north east of Meru, along the Meru-Makutano-Maua Highway and offers courses in engineering, science, information technology and business. The third institution to be surveyed is the Meru National
Polytechnic (MNP). According to its Website, MNP is located about 4km from Meru town along Meru-Nanyuki.

### 3.4 Target Population

The target population for a survey is the entire set of units for which the survey data are to be used to make inferences (Cox, 2010). The target population for this study will constitute of all private and public higher educational institutions within Meru County. The target population will be Information Sciences teaching staff, Information Sciences’ students, human resources (HR) staff, registry and/or records centres staff and Information Sciences (ICT majors) staff in two universities and one national polytechnic in the study area. These individuals are associated with organizations which comprise of one private university, one public universities and one national polytechnic in Meru County. These institutions of higher education were chosen because they constitute of individuals and subjects with information and characteristics of interest to the researcher. The institutions and organizations that make up the target population are; Kenya Methodist University (KeMU) Meru Campus, Meru University of Science and Technology (MUST) and Meru National Polytechnic (MNP).

The researcher will target the following six categories of respondents, namely; - faculty/teaching staff, Information Science students, human resources staff, registry/ records Centre staff, and lastly Information Communication Technology (ICT) staff. The ICT staffs are Information Sciences graduates majoring in IT option. The faculty staff is the Information Sciences teaching staff who comprise of tutorial fellows, assistant lecturers, senior lecturers, assistant professors and professors. The students will comprise of those undertaking all levels training in Information Science, namely certificate, diploma, undergraduate degree, master’s degree and doctorate.
degree. The human resource category will comprise of staff working in the HR department such as assistant human resources officers, senior human resources officer and human resources manager. HR staffs are considered as respondents as they are key participants in the recruitment process of Information Science professionals. Library staff will comprise of staff working in library section and who have professional training in Library and/or Information Sciences. They consist of librarians, deputy librarian, senior librarians, librarians, assistant librarians, senior assistant librarians and library assistants (KeMU Library Policy, 2014). The library staff members are either on permanent and pensionable terms or contractual/part-time terms. Registry and/or records center’s staff comprise of the following designations; assistant records officer, senior records officer, records officer and heads of registry. The ICT staff respondents will comprise of those who undertook Information Science training but specialized in Information Technology (IT).

At the Kenya Methodist University, the following constitutes part of the target population. Records from the Deputy University Librarian’s office indicate that there are eight (8) staff members comprising of the Acting Deputy University librarian, three (3) senior library assistant, and four (4) library assistants. According to data from Academic Registrar’s Office, there are three (3) staff members who teach students in the Information Science department on part-time basis, while figures from the HR Department indicated that there are four (4) registry staff members in the academic and administrative registries. Out of the four (4) registry staff members, only one (1) is a trained Information Science professional with master’s degree. Records from the student’s indicate that there are four (4) students undertaking degree and three (3) undertaking master’s degree.
At the Meru University of Science and technology (MUST), records available from the Chairman, School of Computing and Informatics, indicate that there are eight (8) staff member teaching Information Science course under part-time basis as tutors while there are seventy (70) students all undertaking undergraduate degree programmes. Data availed by the university librarian indicate that there are twenty two (22) staff member of which two (2) have masters degrees, five (5) have undergraduate degrees, thirteen (13) have diploma certificates while two (2) have certificates in Information Sciences. Records at the Human Resources department of the Meru University of Science and Technology (MUST) also indicated that there are four (4) ICT staff members out of which only one (1) has a diploma in Information Science, Information Technology (IT) option. Data availed by the HR department also shows that there are four (4) registry staff members who are holders of diploma in records and archives management while else the HR office is manned by four (4) staff members.

The third institution constituting part of the target population is the Meru National Polytechnic (MNP). Records from the department of Information Communication Technology under which the Library and Information Science diploma programmes are offered indicate that there is nine (9) teaching staff. Figures availed from the department also indicate that there are thirty one (31) students enrolled in the two programmes related to information Sciences; with twenty one (21) pursuing Diploma in Information Studies (Library Studies) while ten (10) are enrolled in a Craft Certificate in Information Studies (Library Studies) Module I. Additionally, there are three (3) staff members in the HR department. Data from the librarian-in-charge office shows that there are five (5) library staff members, out of which two (2) have undergraduate degree while the remaining three (3) are diploma holders. Records from the HR department also revealed that there are three (3) diploma holders registry staff members, one (1) in the academic registry and
two (2) in the administrative registry, while else there is no Information Communication Technology (ICT) staff with training background in Information Sciences, IT option. These groups of organizations constitute the study population. From the data collected by the researcher from the above mentioned sources at the respective organizations, the total population of the respondents from the above institutions and organizations is 182 as shown in Table 3.1.

Table 3.1 Distribution of the Target Population

<table>
<thead>
<tr>
<th>Institution</th>
<th>Faculty/ Teaching staff</th>
<th>Students</th>
<th>HR Resource Staff</th>
<th>Library staff</th>
<th>Registry/Records Centre staff</th>
<th>ICT Staff</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya Methodist University</td>
<td>4</td>
<td>7</td>
<td>3</td>
<td>9</td>
<td>2</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>Meru University of Science and Technology</td>
<td>8</td>
<td>70</td>
<td>4</td>
<td>22</td>
<td>4</td>
<td>1</td>
<td>109</td>
</tr>
<tr>
<td>Meru National Polytechnic</td>
<td>9</td>
<td>31</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>51</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>21</strong></td>
<td><strong>105</strong></td>
<td><strong>10</strong></td>
<td><strong>36</strong></td>
<td><strong>9</strong></td>
<td><strong>1</strong></td>
<td><strong>182</strong></td>
</tr>
</tbody>
</table>

3.5 Sampling Technique

Kothari (2004) defines a sampling technique as the methods of coming up with a representative of the total population as possible in order to produce miniature cross-section. The study will employ a mixture of stratified and purposive sampling “stratified purposeful sampling” to come up with the sample. Patton (2001) describes stratified purposive sampling as samples within samples and suggests that purposeful samples can be stratified or nested by selecting particular units or cases that vary according to a key dimension. Wilmont (2009) also defines stratified purposeful sampling as a method of sampling that involves the division of a population into smaller groups known as strata. The choice of stratified purposeful sampling was informed by
the need to guide the selection of the respondents since the target population has variants such as education levels, age and work experience. According to Paula (2016), stratified purposeful sampling has the advantage of offering more precise information inside the subpopulations about the variables being studied. In undertaking “stratified purposeful sampling”, the researcher identified categories that are important to the study and for which there is likely to be some variation such as age, education levels, work experience and levels of qualifications. The choice of stratified purposeful sampling technique is also informed by the advantage that it offers the strength of helping the researcher account for potentially relevant variation across study elements. By using stratified purposeful sampling, the researcher will ensure that the each sample has a common characteristic, such as gender. The sample size for each category of respondents in each stratum was determined using proportion in order to come up with the total sample of one hundred and twenty three (123) respondents as illustrated in 3.7.

3.6 Sampling Procedure

Sampling procedure describes the process used in determining the sample size. In this study, the sample size was drawn from staff and students of the selected three institutions of higher learning in Meru County. “Stratified purposeful sampling” was employed in the selection of the sample size. This involves a process of stratification (for example different strata are made on the basis of different staff jobs, education levels and student levels of study) and a random sample is then drawn from each stratum (Sekaran and Bougie, 2010). Thus the target population was categorized into three strata made of respondents from each of the three institutions who comprise of teaching staff, students, HR staff, Library staff, Registry/Records center staff and ICT staff.
3.7 Sample size

According to Greer and Kolbe (2003), a sample size is a set of quantities which are drawn from an already known population with the sole aim of estimating the characteristics of the population. In the determination of sample size, the objectives of the study and characteristics of the target population will be considered in order to arrive at effective sample size. The researcher will sample one hundred and eighty two (182) respondents in the three (3) institutions in Meru County. In order to determine a representative sample size of the respondents to be drawn from the one hundred and eighty two (182), this study will adopt a formula by Sloven (1960). This equation has been applied extensively by researchers in various fields including social sciences, business and physical sciences thus it has been applied and tested by other researchers. The Sloven’s equation will be used in eliminating a sample size (“n”) from a known population (“N”) and a coefficient of variation (“C”) where:-

\[ n = \frac{N}{1 + Ne^2} \]

Where \( n \) = sample size

\( N \)= population size, which is one hundred and eighty two (182) in this study

\( e \)= error of margin which is a constant value of 0.05 according to the Sloven’s equation

\[ n = \frac{182}{1 + (182*0.05^2)} \]

=123

To ascertain the above sample size, the researcher considered the Krejcie and Morgan sample size population as illustrated in table 3.2. According to Krejcie and Morgan, the target population of hundred and eighty two (182) respondents should yield a sample size of one hundred and
twenty three (123) respondents. The computation of the sample size using the Sloven equation conforms and gives a sample size that conforms to the Krejcie and Morgan which indicates that a target population in the range of a hundred and eight to a hundred and ninety (180-190) should have a sample size of a hundred and twenty three (123) respondents.

Table 3.2: Krejcie-Morgan Sample-Size Table

<table>
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<th>S</th>
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</table>

Where N is population Size; S is sample Size

Source: Krejcie & Morgan, 1970
Table 3.3 : Sampling Frame for Respondents

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<th>Category of Population Sample</th>
<th>Target population</th>
<th>Sample Size</th>
<th>Percentage</th>
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<td>Faculty (Teaching) Staff</td>
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<td>17</td>
<td>13.82</td>
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<td>Information Science Students</td>
<td>105</td>
<td>62</td>
<td>50.41</td>
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<td>Human Resources staff</td>
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<td>7</td>
<td>5.69</td>
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<td>Library Staff</td>
<td>36</td>
<td>30</td>
<td>24.39</td>
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<tr>
<td>Registry/Records Centre staff</td>
<td>9</td>
<td>6</td>
<td>4.88</td>
</tr>
<tr>
<td>ICT Staff</td>
<td>1</td>
<td>1</td>
<td>0.81</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>182</strong></td>
<td><strong>123</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The nine (9) faculty/teaching staff, the informants comprise of two (2) staff members from Kenya Methodist University (KeMU), seven (7) teaching staff members from Meru University Of Science and Technology (MUST) and nine (9) teaching staff members from Meru National Polytechnic (MNP). Where a faculty staff doubles as a student, such a respondent will be prevailed upon to indicate in the questionnaire one category of their preference to avoid redundancy. The twenty sixty two (62) student respondents comprise of three (3) students from KeMU, where by two (2) are masters students and one (1) is an undergraduate student, thirty nine (39) students in MUST where they are undertaking bachelor’s degree programme and twenty (20) students at MNP undertaking diploma in Library Information Science. The seven (7) Human Resource (HR) staff respondents comprises of one (1) senior HR staff in KeMU, three (3) HR assistants at MUST and three (3) HR assistants from the MNP. Of the thirty (30) library staff respondents, eight (8) will be KeMU library staff out of which one (1) is a doctorate holder (the Acting University librarian), five (5) are Bachelor Degree holders (Senior Library Assistants) while two (2) are diploma holders (library assistants). There will be eighteen (18) library respondents from MUST who shall comprise of two (2) master’s degree holders (the
university librarian and an assistant librarian), four (4) bachelor’s degree holders (senior library assistants), ten (10) diploma holders and two (2) are certificate holders. The four library respondents at the MNP will be two (2) senior library assistants with bachelor degrees and two (2) library assistants who are diploma graduates. In the segment of registry and records centers staff, the respondent from KeMU will be one (1) staff member with master’s degree in Information Sciences working at the student’s records automation department. The registry staff respondents in MUST will be four (4) registry assistants; two (2) at the administrative registry and two (2) at the academic registry while there will be one (1) registry respondent at the MNP. In the Information Communication Technology (ICT) staff category, which is those Information Technology (IT) staff that are professionals in Information Science but majoring in the IT option, there will be only one (1) respondent from the MUST.

3.8 Strata Sample Sizes

In this study, the researcher targeted the six categories of respondents with different variables and characteristics such as occupation and education levels. In each stratum, the researcher selected respondents from the three institutions selected for study. From the one hundred and twenty three (123) respondents of the sample size, the researcher divided the sampled population into three strata consisting of all the respondents’ categories, namely; - faculty/teaching staff, Information Sciences students, human resources staff, library staff, registry/records center staff and ICT staff (Information Science graduates majoring in IT). The researcher used proportionate stratification where by the sample size of each stratum is proportionate to the population size of the stratum. Strata sample sizes are determined by the following equation by Sidney T. (2001).

\[ n_h = \left( \frac{N_h}{N} \right) \times n \]
Where \( n_h \) is the sample size for stratum \( h \), \( N_h \) is the population size for stratum \( h \), \( N \) is total population size, and \( n \) is total sample size. The researcher divided the sample into three strata of subpopulations and in such a way that all elements and variables of the different category of respondents are represented in each of the stratum.

a) Size of Stratum A (Kenya Methodist University):

\[
 n_h = \left( \frac{N_h}{N} \right) \times n \;
\text{where } N_h = 22; \; N = 182 \text{ and } n = 123 \\
= \left( \frac{22}{182} \right) \times 123 \\
= 15
\]

b) Size of Stratum B (Meru University of Science and Technology):

\[
 n_h = \left( \frac{N_h}{N} \right) \times n \;
\text{where } N_h = 109; \; N = 182 \text{ and } n = 123 \\
= \left( \frac{109}{182} \right) \times 123 \\
= 74
\]

d) Size of Stratum C (Meru National Polytechnic):

\[
 n_h = \left( \frac{N_h}{N} \right) \times n \;
\text{where } N_h = 51; \; N = 182 \text{ and } n = 123 \\
= \left( \frac{51}{182} \right) \times 123 \\
= 34
\]
The three strata consist of all the institutions under study with Stratum A (Kenya Methodist University), Stratum B (Meru University Of Science and Technology-MUST) and Stratum C (Meru National Polytechnic). Each of the strata will comprise of all the categories of the respondents where applicable. These categories include the faculty/teaching staff, Information Science students, human resource (HR) staff, library staff, registry/records center staff and the Information Communication Technology (ICT) staff, all of whom will be chosen using purposive selection.

**Table 3.3: Stratum Sizes**

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Stratum A</th>
<th>Stratum B</th>
<th>Stratum C</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty (Teaching) Staff</td>
<td>2</td>
<td>9</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>Information Science Students</td>
<td>3</td>
<td>39</td>
<td>20</td>
<td>62</td>
</tr>
<tr>
<td>Human Resource Staff</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Library Staff</td>
<td>8</td>
<td>18</td>
<td>4</td>
<td>30</td>
</tr>
<tr>
<td>Registry/Records Centre Staff</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>ICT Staff</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Stratum Size (nh = (Nh / N) * n)</strong></td>
<td><strong>15</strong></td>
<td><strong>74</strong></td>
<td><strong>34</strong></td>
<td><strong>123</strong></td>
</tr>
</tbody>
</table>
Each of the strata will selected purposively so as to comprise all the possible respondents and to enhance representativeness of the respondents. For instance; stratum A (KeMU) will comprise of fifteen (15) respondents namely:- two (2) part-time teaching staff members; three (3) students who comprises of two (2) masters students and one (1) bachelor degree students; one (1) senior HR assistant staff; Eight (8) library staff members who comprise of one (1) doctorate degree holder (Ag. University Librarian); five (5) Bachelor’s Degrees holders (Senior Library Assistants), and two Diploma holders (Library Assistants); and one (1) registry staff, a Master’s degree holder.

The second stratum (Meru University of Science and Technology – MUST), will consist of nine (9) teaching staff, five (5) of whom are master’s degree holders and three (3) are doctorate degree holders. The students segment of stratum B will comprise of thirty nine (39) degree students in all years of study. The HR segments in MUST will comprise of three (3) HR assistants while else the library staff segment will comprise of two (2) master’s degree holders (University Librarian and Assistant Librarian), four (4) bachelor’s degrees holders (Senior Library Assistants), ten (10) diploma holders and two (2) certificate holders (library assistants). Stratum B will also comprise of four (4) registry assistants (diploma holders) and one (1) ICT staff.

The third stratum (Meru National Polytechnic - MNP) will consist of eight (8) teaching staff; twenty (20) Information Science students; four (4) library staff comprising of two (2) senior library assistants and two (2) library assistants and one (1) registry assistant. All the categories of the respondents will thus be chosen and allocated in a purposive way so as to reflect different variations of the respondents such as education levels thus enhancing their representativeness.
3.9 Data Collection Methods

According to Kothari (2004), data collection methods are the procedures, techniques and tools used when collecting data from the sampled participants. In collecting data for this study, questionnaires will be employed. A questionnaire is a set of systematically structured questions used by a researcher to get needed information from respondents (Ong’anya and Ododa, 2009). Brown (2010) opines that questionnaires have been termed differently, including surveys, schedules, indexes, indicators, profiles studies, opinions, tests, checklists scales, inventories and forms. They are any written instruments that presents respondents with a series of questions or statements to which they react to either by writing their own answers or selecting from among existing answers. The researcher will use self-administered questionnaires to the respondents but the researcher will also be available to make clarifications without interpreting questions to the respondents in order to avoid increased biasness. The questionnaires will have a combination of both close-ended and open-ended questions in order to provide more diverse details. Open-ended questions will allow the respondents to answer the questions in their own words hence provide more details while closed-ended questions will be easier to administer and analyze.

The use of questionnaires as a data collection tool is informed by the following merits. First, they will allow the researcher to reach a large group of respondents at a relatively low cost. In addition, the researcher will be able to reach people who are spread across a wide geographical area. Use of questionnaires will also offer a practical and simple way of gathering information for the researcher. Lastly, the use of this methodology will enable the researcher to be free from biasness as the respondents will fill pretested questions.
3.10 **Research Procedure**

The researcher will develop a proposal under the guidance of the supervisors. Thereafter, the researcher will approach the respondents and organizations to seek permission to conduct the research. This will be done one week in advance. The researcher will distribute the questionnaires to the various respondents within Meru County. Questionnaires will be administered by the researcher and after the questionnaires are filled in, respondents will be thanked and informed that they should feel free to contact the researcher to discuss any issues that might have been raised in the survey. Qualitative and quantitative data will be collected from the respondents who will be given one month to respond to the questionnaires. The respondents will be assured of the confidentiality of the information that they will provide. Qualitative and quantitative data collected will include opinions and preferences of the respondents. The data collected will be analyzed and presented in tables, bar graphs and pie-charts.

3.11 **Reliability and Validity of Instruments**

Reliability is the degree to which a test consistently measure whatever it is meant to measure, and is expressed numerically (Gay, 2009:318). It is the ability to consistently yield the same results when repeated. Measurements are taken of the same subjects under the same conditions (Orodho, 2005). Validity “refers to the extent to which measures actually measure what they claim to measure” (Bellamy, 2012). To ensure reliability and validity, the researcher will design and pilot-test the questionnaires before using them for the study. The pilot study will be carried out at the Kenya Methodist University, Meru Campus, which is part of the study. The purpose of the pilot test will be to refine the questionnaire so that the respondents have least challenges in
answering the questions. In addition, it will help the researcher in assessing the questions’ validity and the reliability of the data to be collected.

The researcher will ensure the validity of the questionnaire to be used to gather data by giving them to experts who will give their observations and suggestions. These experts will be lecturers and in particular in the Department Of Information Science, KeMU. Their input will be used to review the draft questionnaire prior to its adoption.

3.12 Quality Control

According to Roe (2008), quality control refers to the efforts and procedures that researchers put in place to ensure the quality and accuracy of data being collected using the methodologies chosen for a particular study. This is vital in varied ways. For instance, researcher need sample management systems to ensure proper case processing, the monitoring of appropriateness of the questionnaires and other quality-control aspects of the research process, all of which can affect the quality of data and thus the results.

3.13 Data Analysis and Presentation

The study gathered both quantitative and qualitative data. Before data analysis is done, the questionnaires’ responses will be edited, coded, tabulated and process by means of a computer for completeness and consistency. The data collected will be analyzed according to the research questionaries’ to establish facts about the problem of study. In this study, data analysis shall commence once data collection is completed. Analysis of data will be based on returned copies of questionnaire. The data collected will be analyzed in order to transform into useful information that will be presented in pie charts, graphs and tables. Descriptive statistics will be used to analyze the data. There were percentages, frequency counts, and means with the help of
the statistical packages for social sciences (SPSS).

In addition, inferential statistics will involve both correlation and multiple regression will be conducted to determine associations in $y$, the dependent variable, and other independent variables ($x$) in the study.

The equation that presents the algebraic expression of the analytical model to be applied will be: 

$$Y=c+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\epsilon$$

Where:

- $Y$ = Employment Opportunities in the Field of Information Science
- $C$ = Constant
- $X_1$ = Availability of Jobs for Information Science professionals
- $X_2$ = Awareness of Information Science Profession by Employers
- $X_3$ = Promotion and Marketing of the Information Science Profession
- $X_4$ = Training and Development of Information Science professionals
- $\epsilon$ = Error term
- $\beta_1$ = Regression coefficient of variable $X_1$
- $\beta_2$ = Regression coefficient of variable $X_2$
- $\beta_3$ = Regression coefficient of variable $X_3$
- $\beta_4$ = Regression coefficient of variable $X_4$

$\beta_1 – \beta_n$ represents the change in availability of employment opportunities in the field of information Science for every change in; Availability of Jobs for Information Science
professionals, Awareness of Information Science Profession by Employers, Promotion and Marketing of the Information Science Profession and Training and Development of Information Science professionals, respectively, while $\varepsilon_i$ represents other factors that influence employment.

3.14 Ethical Considerations

Informed consent of the respondents will be sought while their anonymity and confidentiality of the information collected will be upheld during and after the study. The researcher will conform to the principle of voluntary consent where the respondents shall participate in the research willingly, and the real purpose of this research will be disclosed to the respondents. The researcher will also seek permission from relevant authorities before undertaking data collection.

3.15 Chapter Summary

The researcher will adopt descriptive survey design in conducting the research to survey three institutions of higher learning, namely two universities and one national polytechnic. The research will be conducted within the Meru County while the three institutions forming the target population are the Kenya Methodist University (KeMU), Meru University of Science and Technology (MUST) and Meru National Polytechnic (MNP). The informants will comprise of teaching staff in Information Science department/schools, students undertaking Information Science courses (certificate, diploma, bachelor degree, masters and PhD degree. The third category of respondents is Human Resources (HR) staff that are considered key participants and decision makers in the recruitment process. Other informants are the registry and/or records centers staff members who are Information Science professionals and lastly the Information Communication Technology (ICT) staff who are trainees in Information Sciences who majored in ICT option.
Data will be collected from the various and relevant offices and departments in the three institutions under survey gave a target population of one hundred and eighty two (182) respondents. The researcher will use stratified purposive sampling that yielded one hundred and twenty three (123) respondents, constituting the sample size. Three strata were calculated that apportioned the one hundred and twenty three (123) respondents among the three institutions with stratum A (KeMU) having fifteen (15) informants; stratum B (Meru University of Science and Technology) with seventy four (74) informants and Stratum C (Meru National Polytechnic) having thirty four (34) respondents. A mixture of close-ended and open-ended questionnaires will be used to collect data qualitative and quantitative. Finally, the data collected will be analyzed and presented in pie charts, graphs and tables so as to be transformed into useful information from which meaning and interpretation will be deduced. The researcher will also ensure adherence to ethical considerations so as to protect the respondents’ anonymity and ensure the respondent’s free participation in the research.
References


Ahmad, P. (2009). *The Role of the Library and Information Science Professionals as Managers: A Comparative Analysis*. Web Portal and E-Services Department, King Saud University,
Riyadh, Kingdom of Saudi Arabia.


London: Facet.


Tella, A (2009). *Library and Information Science in Developing Countries: Contemporary*. 

*IGI Global, USA.*


http://www.ala.org/groups/affiliates/affiliates/asist retrieved on 18th September 2015


http://www.kenyalibraryassociation.or.ke/ retrieved on 1st December 2015.


http://www.pewresearch.org/fact-tank/2015/04/14/on-equal-pay-day-everything-you-need-to-

        know-about-the-gender-pay-gap/ retrieved on 14th December 2015.

### APPENDIX I: Research Timetable

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*Source: Researcher (2017)*

### APPENDIX II: Research Budget
The following is a breakdown of the estimates for financial implications of the research as itemized below:

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<th>Item</th>
<th>Quantity</th>
<th>Cost (KSh.)</th>
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<td><strong>Total Cost</strong></td>
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</table>
APPENDIX II : Letter of Introduction

Geoffrey Mwendwa Benson

PO BOX 267-60200

Meru

6th February, 2017

To the Head

..........................
..........................

Dear Sir/Madam

RE: REQUEST TO CARRY OUT RESEARCH IN YOUR ORGANIZATION/INSTITUTION

I do request to be allowed to carry out the above research with in your organization. I am a post graduate student at Kenya Methodist University (Student NO. ISK-3-3121-2/2014). I am undertaking a master’s degree in Information Science. I am doing a research on “The Factors Determining Employment Opportunities for Information Science Professionals in Meru County, Kenya”. This research will be conducted purely for academic purposes. However, the research findings may be made public after the completion of the study for future researchers and other relevant stakeholders to guide in their work.

Every care will be taken in the data collection procedure to ensure that it is within ethical limits.

Thank you in advance for your cooperation.

Yours Faithfully

Geoffrey Mwendwa Benson
Appendix III : Letter To The Respondents

Geoffrey Mwendwa Benson

PO BOX 267-60200
Meru

6th February, 2017

Dear Sir/Madam

RE: THE INFLUENCE OF CAREER PRACTICES ON EMPLOYMENT OPPORTUNITIES OF INFORMATION SCIENCE PROFESSIONALS IN MERU COUNTY, KENYA.

I am a student in Kenya Methodist University pursuing a Master’s Degree in Information Science. You have been selected as a respondent for the study to investigate the influence of career practices on employment opportunities of Information Science professionals in Meru County, Kenya.

This is in partial fulfillment of a master’s degree in Information Science at Kenya Methodist University. The information you provide will not be used for any other purpose other than for the purpose of this research and will therefore be treated confidentially.

Thank you for your cooperation.

....................

Geoffrey Mwendwa Benson

ISK-3-3121-2/2014
APPENDIX IV : Questionnaires

Section A : Demographic Information (Please tick the correct box)

1. Kindly indicate your appropriate institution
   a) Kenya Methodist University [ ]
   b) Meru University of Science and Technology [ ]
   c) Meru National Polytechnic [ ]

2. Kindly indicate your gender Tick the appropriate box: Male [ ] Female [ ]

3. Please select your age bracket (Tick the appropriate box): 18-30 years [ ] 31-40 years [ ] 41-50 years [ ] 51 Years and above [ ]

4. Which of the following categories of respondents are you? (Tick the appropriate box)
   a) Faculty/Teaching Staff Member [ ]
   b) Student [ ]
   c) Human Resources Personnel [ ]
   d) Information Science Professional [ ]

5. From the choice of 1 above, kindly indicate your appropriate levels/segments below?
   a) Faculty Member:
      i) Tutorial Fellow [ ]
      ii) Assistant Lecturer [ ]
      iii) Lecturer [ ]
      iv) Senior Lecturer [ ]
      v) Assistant Professor [ ]
      vi) Professor [ ]
b) Student:
   i) Certificate [  ]
   ii) Diploma [  ]
   iii) Degree [  ]
   iv) Masters [  ]
   v) Doctorate [  ]

c) Human Resource Manager
   i) Kenya Methodist University [  ]
   ii) Meru University of Science and Technology [  ]
   iii) Meru National Polytechnic [  ]

d) Information Science Personnel
   i) Kenya Methodist University [  ]
   ii) Meru University of Science and Technology [  ]
   iii) Meru National Polytechnic [  ]
   iv) Self-employment [  ]

   Other, (Please indicate)……………………..
OBJECTIVE ONE: Career Opportunities for Information Science Professionals in Meru County.

6. In the rating of 1 to 5 (1 =Least, 2 =Less, 3 = Moderate, 4 = More and 5 = Most) how do you rate the following Information Science jobs in their marketability in the job industry?

   a) Records Managers [ 1 ]; [ 2 ]; [ 3 ]; [ 4 ]; [ 5 ]
   b) Knowledge Managers [ 1 ]; [ 2 ]; [ 3 ]; [ 4 ]; [ 5 ]
   c) Archivists [ 1 ]; [ 2 ]; [ 3 ]; [ 4 ]; [ 5 ]
   d) Librarianship [ 1 ]; [ 2 ]; [ 3 ]; [ 4 ]; [ 5 ]
   f) ICT [ 1 ]; [ 2 ]; [ 3 ]; [ 4 ]; [ 5 ]
   g) Other, (Please indicate) ............................................................................................................

7. If a Student, Faculty Member or an Information Science Professional in Question (4) above, Which is your specialization in information management training?

   a) Records Manager [ ]
   b) Knowledge Managers [ ]
   c) Archivists [ ]
   d) Librarianship [ ]
   e) Information Communication Technology [ ]
   f) Other, (please indicate)..................................................................

8. Are you satisfied with your career choice in Question 7 above? Yes [ ] No [ ]

If (No) please explain briefly why not .................................................................
9. How did you make a choice for training on the specialization in Question 7 above?
   a) Through career counseling session [ ]
   b) Through labor market research [ ]
   c) Through colleagues, friends and relative [ ]
   d) Through networking forums [ ]
   e) Web searches [ ]
   f) Any Other (Please indicate) ........................................................................
       ........................................................................................................
       ........................................................................................................
       ........................................................................................................

10. If you are a Human Resource Management practitioner in Question 1 above, who among the following are involved in making decisions in the recruitment process in your organization?
   a) The Top Management [ ]
   b) Sponsors [ ]
   c) Stakeholders [ ]
   d) The Government [ ]
   e) Any other (Please indicate) ........................................................................

11. Which among the following segments of Information Sciences’ areas of specialization do you consider as appropriate for IS professionals?
   a) Registry [ ]
   b) IT [ ]
   c) Library [ ]
   d) Public Relations [ ]
e) Any other (Please indicate)…………………………………………………………

12. a) If you are offered a chance to change your career to another within the Information Science profession, which one of the following would you prefer?

a) ICT [ ]

b) Librarianship [ ]

c) Publishing and media studies [ ]

d) Records and archives management [ ]

e) Knowledge management [ ]

b) Kindly indicate reasons why you would want to change your career in 12 (a) above:………………………………………………………………………………………
……………………………………………………………………………………………

OBJECTIVE TWO:  Awareness of the Information Science Profession in Public and Private Establishments within Meru County.

13. If you are a Faculty Member or an Information Science Professional in 4 above, have you organized career sensitization for Information Science professionals? Yes [ ] No [ ]

14. If Yes in Question 10 above, which of the following have you used as a forum for the task?

a) Workshops [ ]

b) Career counseling sessions [ ]

c) Internship placements [ ]

d) Networking students with potential employers [ ]
15. How do you rate awareness of Information Science profession by the following?

a) Human resource managers: Low [ ] Moderate [ ] High [ ]
b) Employees: Low [ ] Moderate [ ] High [ ]
c) Policy makers: Low [ ] Moderate [ ] High [ ]

16. If you are a Human Resource Manager in question 1 above, are you aware of the skills and competencies of Information Science professionals?

Yes [ ] No [ ]

17. If Yes in Question 13 above, list key skills and competencies required by Information Sciences personnel?

a) ........................................
b) ........................................
c) ........................................
d) ........................................

18. In case of recruitment process for an information management position, who among the following professionals and specialties do you think will be considered?

a) Information Science [ ]
b) Knowledge Managers [ ]
c) Computer and ICT [ ]
d) Business Administration [ ]
e) Social Sciences [ ]
f) Any other (Please indicate) ...............................................................
19. If you are a Faculty Member, student or Information Science personnel in question 1 above, in your own opinion, how long do Information Science professionals take before securing employment after graduation?
   a) Less than a month [ ]
   b) More than 5 months [ ]
   c) More than a year [ ]
   d) More than One and half years [ ]
   e) More than Two years [ ]
   f) Any Other (Please indicate).................................................................

20. Which of the following are the best channels in securing employment chances for Information Science professionals?
   a) Through job adverts [ ]
   b) Through Internal recruitment [ ]
   c) Through networking with friends, college mates etc. [ ]
   d) Any other (Please indicate)...........................

OBJECTIVE THREE: Promotion of Information Science as an Emerging Profession in Meru County

21. If you are a Faculty Member, Student or an Information Science Personnel in Question 4 above, have you ever participated or undertaken an activity to promote Information Science professions? Yes [ ] No [ ]
22. If Yes in Question 21 above, which among the following includes the activities undertaken?

   a) Workshops [   ]
   b) Seminars [   ]
   c) Trade shows [   ]
   d) Media features [   ]
   e) Professional organizations [   ]
   f) Publicity campaigns [   ]
   g) Drafting of Legislations [   ]
   h) Any other (please Indicate) .................................................................

23. In your opinion, has Information Science profession been sufficiently promoted and marketed? Yes [ ] No [ ]

24. If No in Question 23 above, what do you consider as the likely factor impeding the promotion and marketing of Information Science?

   a) Inadequate human resources [   ]
   b) Poor ICT infrastructure [   ]
   c) Financial constraints [   ]
   d) Any other(s) (Please Indicate) .................................................................

25. Who among the following stakeholders do you consider as key in enhancing the Information Science profession?

   a) Academia [   ]
   b) Consultants [   ]
   c) Heads of Professional bodies [   ]
d) Any other (Please Indicate).................................................................

26. Which of the following channels do you consider as the most appropriate in promoting and marketing of Information Science profession?

a) Websites [ ]

b) Email alerts and dispatches [ ]

c) Brochures [ ]

d) Media releases and profiles [ ]

e) Seminars and workshops [ ]

f) Legislations

g) Others (Please Indicate).................................................................

27. Which among the following facilities do you consider as vital in advancing awareness of Information Science profession?

a) Human resources [ ]

b) ICT infrastructure [ ]

c) Money and facilitations [ ]

d) Any other(s) (Please Indicate) ......................................................

OBJECTIVE FOUR: Level of Training for Information Science Professionals in Meru County

28. If you’re an Information Science professional in Question 1 above, tick your current level of academic qualifications.

a) Diploma [ ]

b) Advanced Diploma [ ]
c) Bachelor Degree [ ]

d) Master Degree [ ]

e) Doctorate [ ]

f) Any other (Please Indicate)………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

29. Which of the following avenues of training have you attended?

a) Seminars [ ]

b) Workshops [ ]

c) Conferences [ ]

d) Exhibitions [ ]

e) Any other (Please Indicate)………………………………………………………………………………

30. What do you consider as the key impeding factors in training competent and market ready Information Science professionals in Kenya?

a) Training resources [ ]

b) Industrial placement chances [ ]

c) Financial constraints [ ]

d) Relevant training tools and equipment [ ]
31. Which of the following do you consider as the factor(s) preventing the recruitment of Information Science professionals?

a) Lack of employers awareness of the Information Science professions [ ]
b) Lack of promotion and marketing of Information Science professions [ ]
c) Lack of employers policy in information management [ ]
d) Competitiveness of Information Science professionals with other professionals[ ]
e) Any other factors (Please Indicate)………………………………………………………………………………………….

32. Which of the following way(s) do you consider as the most appropriate in improving the recruitment and employability of Information Science professionals?

a) Diversification of IS training with other professions like Law, Business etc.[ ]
b) Use of professional organizations and bodies to promote and marketing IS professions [ ]
c) Influencing government and private employment policy and decisions through legislation and policy formulation [ ]
d) Any Other (Please Indicate)……………………………………………………………

THANK YOU FOR TAKING YOUR TIME TO ANSWER THE QUESTIONNAIRE.