

# EFFECTS OF E-RECRUITMENT AND E-TRAINING ON HUMAN RESOURCE PERFORMANCE: A CASE STUDY OF TELKOM KENYA

Joseph Mwangi <sup>a\*</sup>, James Mwikya Reuben <sup>b</sup>

<sup>a</sup> Management University of Africa, P.O Box 29677-00100, Nairobi Kenya

<sup>b</sup> Management University of Africa, P.O Box 29677-00100 Nairobi Kenya

<sup>b</sup> [jayshepshenko@gmail.com](mailto:jayshepshenko@gmail.com)

<sup>a</sup> [Jreuben@mua.ac.ke](mailto:Jreuben@mua.ac.ke)

## **Abstract**

*The role of Human Resource information system (HRIS) in business environment has evolved over time to become an integral part of its business operations in Kenya. This study aimed to establish the effects of e-recruitment and e-training on human resource performance: a case study of Telkom Kenya. The study objectives were; E-recruitment on human resources performance, e-training on human resources performance. The study used descriptive research design targeting employees of Telkom Kenya comprising of managers, supervisors and general staff being 210 in total. The target population was sampled randomly from stratus and 50% of the population was sampled making 105 respondents that were obtained and used in the study. The study instruments that were used for data collection were questionnaires for easy administering and answering by the respondents. Data collected was content analyzed using SPSS and results presented on the tables, figures and charts for interpretation. It was clear from the study results that the company website enhances e-recruitment for the desired staff according to 71% while 29% did not agree to this and that use of e-recruitment ensure better applicant tracking during hiring process to employ the suitable person for the duties outlined according to 72% who agreed while the remaining 28% of the respondents did not agree. The study established that 64% of the respondents agreed that e-training provides reliable mentoring and couching necessary for acquisition of necessary skills while 36% did not agree to this. It was also found out that 42% agreed to e-training providing extra training to the employees than other platforms of training in the organization while 58% did not agree to this. the study conclusions were that company website enhances e-recruitment for the desired staff, also the conclusion noted that use of e-recruitment ensure better applicant tracking during hiring process to employ the suitable person for the duties outlined and that e-recruitment enhances hiring decisions by human resource management for effectiveness to a great extent. The study concluded that e-training provides reliable mentoring and couching necessary for acquisition of necessary skills and that that e-training does not necessarily provide extra training to the employees than other platforms of training in the organization. The conclusion also determined that determined that effective reference ensures e-communication being reliable than other forms of communication. The recommendations of the study were that organizations planning to recruit personnel should use the company website so as to get the desired staff for the work needed. Organizations should use e-recruitment in the process to track and hire suitable individuals for work prescribed by the organization.*

**Keywords:** Human resource information systems, e-recruitment, e-training, human resource performance

## INTRODUCTION

### 1.0 Background of the study

Human resource information systems (HRIS) has increasingly transformed since it was first introduced at the General Electric in the 1950s. It is believed that future economic and strategic competitive advantage will rest with the organizations that can most effectively attract, develop, and retain diverse group of the best and the brightest human talent in the market place (Kavanagh *et al.*, 1990). HR Information Systems provide Human Resource Management with the opportunity to become a more efficient and strategic function by standardizing the majority of the organization's HR processes, improving the quality and speed of available information and improving services to employees (Ball, 2011). If designed correctly the system manages employee data in line with how the organization is managed; hence the need for a multinational organizations to implement a global HRIS (Troshani *et al.*, 2011). It is important to note that Human resource information systems (HRIS) has increasingly transformed since it was first introduced at the General Electric, USA, in the 1950s. It is further believed that future economic and strategic advantage will rest with the organizations that can most effectively attract, develop, and retain diverse group of the best and the brightest human talent in the market place.

Africa has been experimenting with Technology since the 1980's; it is now time to fully embrace it with the rest of the world as a way of life and especially to manage Human resources. Unfortunately, HR function in Africa has not been proactive in its use of technology to provide integrated services or to communicate more effectively (Troshani *et al.*, 2011). This is because some organizations still rely on sending of parcels and other manual means of communication. The few initiatives made have by and large originated from IT experts.

In Kenya, deliberate strides have been taken to get the country to some high technology levels. The Government sees ICT as a driver towards economic and social development (GOK – Ministry of Information 2008), hence National ICT Policy 2006. Human resource information systems has been put in place to introduce value driven competency based human resource management practices. The human resource information systems implementation team for Capacity Kenya (CK) has championed the use of human resource information systems in Kenya since 2009 and in 2010 their own Wakibi, collaborated with the ministry of public health and sanitation to ensure all HR data for hiring, training, transferring and retiring health workers are electronically entered into human resource information systems by the complement section. However, continuous monitoring and evaluation is vital in determining whether results are being achieved and what needs to be improved. Once a human resource information systems investment has been implemented by an organization, management needs to assess how successful it has been in achieving its goals.

In 2007 France Télécom (now Orange S.A.) acquired 51% of Telkom Kenya's shares at a cost of US\$390 million. In November 2012, the shareholding structure changed due to a decision by the Kenyan government to convert the shareholder loans into equity in order to ease Telkom Kenya's debt burden. It was subsequently confirmed that the Kenya government would retain 40% shareholding down from 49% with the remaining shares held by France Télécom. In January 2013, France Télécom increased its stake in Telkom Kenya to 70% as a consequence of the government's failure to provide its full portion of 2012 funding. In June 2017, the firm is re-branded from "Orange Kenya" to "Telkom Kenya". It is the sole provider of landline phone services in Kenya.

## **1.2 Statement Problem**

Manual handling of employee information poses a number of challenges. This is evident in procedures such as leave management where an employee is required to fill in a form which may take several weeks or months to be approved. Despite the fact that Telkom Kenya has adopted the use of HRIS to automate their human resource functions from the manual system, there have been problems on accuracy and timely data from the human resource department. The firm has been faced with a lot of challenges including lack of updated reward system, an inefficient bio-data system, which affects decisions on HR functions (Ambira & Kemoni, 2011). With the ongoing development of knowledge, economy and information technology use in the telecommunication sector, the realization of human resource information systems at Telkom Kenya has not been comprehensively investigated (Chumo, 2014). A number of studies have been done on human resource information system in the telecommunication and corporate sector. Nyakoe (2014), investigated the extent of use of information communication technology in human resource management in large manufacturing firms in Kenya; Kanini (2008), looked at the implementation of strategic information systems in commercial banks in Kenya. This study therefore sought to establish the effect of HRIS in saving time and cost in the HR process like recruitment, training, payroll processing and communication in telecommunication industry.

## **1.3 General Objectives**

The study aimed to establish the effects of e-recruitment and e-training on human resource performance:  
A case study of Telkom Kenya

### **1.3.1 Specific Objectives**

- i. To determine the effects of e-recruitment on Human resource performance at Telkom Kenya.
- ii. To determine the influence of e-training on Human resource performance at Telkom Kenya.

## **1.4 Research Questions**

- i. What are the effects of e-recruitment on Human resource performance at Telkom Kenya?
- ii. Does e-training influence Human resource performance at Telkom Kenya?

## **LITERATURE REVIEW**

### **2.0 Theoretical Review**

The study adopted the Social Systems Theory by Ludwig von Bertalanffy, 1956 as its anchor theory.

#### **2.1.1 Social Systems Theory (Ludwig von Bertalanffy, 1956)**

Systems theory can reasonably be considered a specialization of systems thinking; alternatively as a goal output of systems science and systems engineering, with an emphasis on generality useful across a broad range of systems. Social systems theory as developed by Ludwig is an option for the theoretical foundation of Human Resource Management (HRM). After clarifying the advantages of using a grand (social) theory as the basic theoretical perspective, the roots of this social systems theory is the deterministic view of systems as machines. Open systems like organizations are multicellular: many heads are present to receive information, make decisions, direct action. Individual and subgroups form and leave coalitions. Boundaries are amorphous, permeable, and ever changing. But the system must exchange resources with the environment to survive. The current generation of HRIS automates and devolves routine administrative and compliance functions traditionally performed by corporate HR departments and can facilitate the outsourcing of HR (Barron *et al.*, 2004). In doing so, HRIS not only make it possible for organizations to significantly reduce the costs associated with HR delivery, but also to reassess the need for retaining internal HR capabilities. However, HRIS also provide HR professionals with opportunities to enhance their contribution to the strategic direction of the firm.

First, by automating and devolving many routine HR tasks to line management, HRIS provide HR professionals with the time needed to direct their attention towards more business critical and strategic level tasks, such as leadership development and talent management (Lawler et al, 2003). Second HRIS provides an opportunity for HR to play a more strategic role, through their ability to generate metrics which can be used to support strategic decision making hence an enhancer to organization performance.

### **2.2 Empirical Literature Review**

#### **2.2.1 E-Recruitment and Human resource performance**

Many organizations have recognized that human resources is the most valued asset the organization has and therefore getting the right hire is at the heart of most Human Resource Managers (Girard and Fallery,

2009). Recent research on recruitment shows that the web is increasing in use both as a source of applicants for organizations and as a job search tool for individuals seeking employment (Pfieffelman, Wagner & Libkuman, 2010). For employers, online recruiting allows for better targeting of candidates than advertising in general newspapers, resulting in a greater availability of qualified applicants (Kar & Bhacharya, 2009). Jobs vacancies posted on Company's website can reach millions of job seekers in real time; as soon as the job is posted on the website (Torrington, Hall and Taylor, 2008).

Today, attracting good candidates towards your company is just a click away and can produce cost savings and higher applicant yields. E-recruitment is the use of internet enabled technologies to attract and select candidates for a live vacancy existing in an organization (Fayyazi and Afshar, 2015). Talent is an inherent potentiality of all of us; it is scarce, and organizations, across the world, have to compete for talent (Bhattacharyya, 2014). Given the global recession and the talent imbalances in the world, organizations today are getting innovative in the way they are engaging with talent. There is increasing realization that being more innovative in sourcing and recruiting can give them a sustainable competitive advantage by enabling one to find and hire more of the right people who can drive innovation throughout the entire organization (Sahay, 2014).

To guarantee maximum performance, organisations need to fix right employees in the right place; hence recruitment seems to be crucial when it comes to the issue of organisational performance. Human resource is the set of individuals who make up of workforce of an organisation, business sector or economy. Human Resources Management (HRM) is a function in organisation designed to maximize employee performance in service of their employer's strategic objectives (Johnason, 2009). According to Collings and Wood (2009), HRM is primarily concerned with how people are managed within organisations, focusing on policies and systems. Human resources departments and units in organisations are typically responsible for a number of activities, including employee recruitment, training and development, performance appraisal and rewarding (managing pay and rewarding systems), industrial and labour relations, and strategy.

### **2.2.2 E-training on Human resource performance**

Armstrong, (2011) defines training as the formal and systematic modification of behavior through learning, which occurs as a result of education, instructions and development and planned experience. Training is the process of equipping the workforce with the necessary knowledge, skills and attitude to tackle the job responsibilities. Staff development on the other hand is improvement of the employees' competences for future environmental demands and adaptability. Beardwell and Holden Len (1997) consider training and development as a planned process to modify attitude, knowledge or skill behavior

through learning experiences to achieve effective performance in an activity or range of activities. Corporations are offering a variety of training programs to meet their organizational needs. These include content on IT and systems, processes, procedures and business practices, industry-specific trainings, managerial or supervisory training, interpersonal skills, compliance, sales, executive development, basic skills, new employee orientation, customer service and quality.

As Reynolds (2014) points out, training has a complementary role to play in accelerating learning. It should be reserved for situations that justify amore directed expected approach rather than viewing it as a comprehensive and all-pervasive people development solution. He also commented that the conventional training model has a tendency to emphasize subject –specific knowledge rather than trying to build core learning abilities. Development is a long term education process utilizing a systematic and organized procedure by which managerial personnel learn conceptual and theoretical knowledge for general purpose. According to Campbell (2017) development implies an individual 3 growth and self-realization in a brand base. Cole (2002) suggests a broader view of knowledge and skills acquisition training. He suggests that he is more concerned with employee potential than immediate skills and views employees as adaptable resource aiming at personal growth and realization of potential of an employee. Armstrong (2011) indicates individual development is the progression by individuals in their career with guidance encouragement and help from the manager.

## 2.4 Conceptual framework

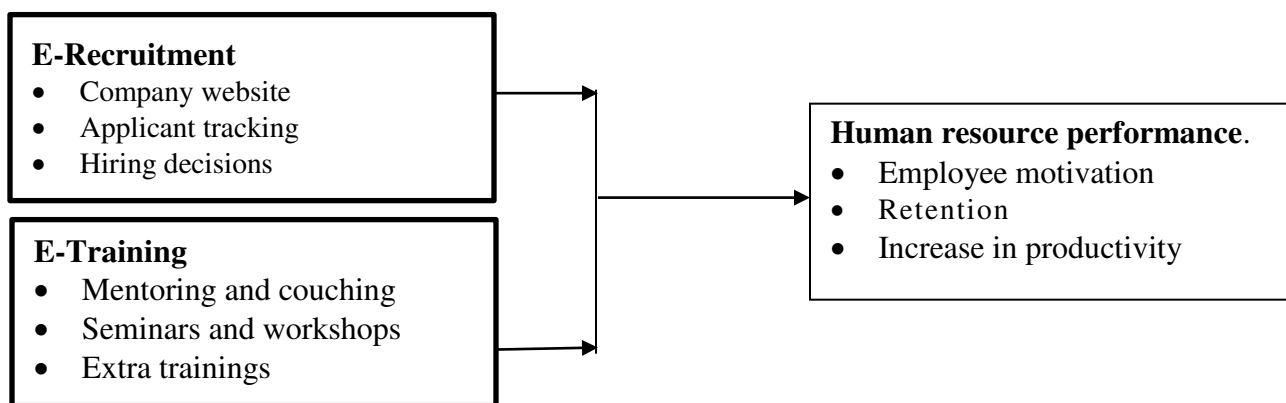


Figure 2.1: Conceptual framework

## RESEARCH DESIGN AND METHODOLOGY

### 3.1 Research Design

This research used descriptive research design. This is because descriptive research presents facts concerning the nature and status of the situation as it exists at the time of the study. The descriptive method was used because it describes things the way they are (Neuman, 2007). Quantitative techniques were used for both data collection and analysis. Quantitative research is a study which findings are mainly the product of statistical summary and analysis. A structured questionnaire was used to collect data from a large representative sample, so that the result could be applied to the entire population. Also, data was analyzed using quantitative methods. This followed the hypothetico-deductive method where hypothesis was formulated based on a review of literature.

### 3.2 Target Population

Target population is therefore a well-defined collection of objects or individuals identified to have similar characteristics of interest to the study. All individuals or objects in a given population normally have a common and binding characteristic or trait. In essence, the population description and the binding common characteristics of its members are usually the same (Sheilds *et al.*, 2013).

For this study, the target population was the employees of Telkom Kenya who included the managers, supervisors and the customer service executives, a total of 210 employees. Table

Table 3. 1: Target Population

Population Category	Population
Managers	30
Supervisors	60
Customer service executives	120
<b>Total</b>	<b>210</b>

Source: Telkom Kenya (2018)

### 3.3 Sample and Sampling Technique

The study engaged probability sampling where every item in the entire population had equal chances of being selected in the study sample for the research. This was done randomly that was independent from the person doing the research to ensure limited biasness in the estimates to provide measurable precision required for relatively little knowledge of the population. It is recommended that 50% of the total population makes a reliable sample size that reduces errors (Kotler, 2006).

Table 3. 2: Sample and Sampling Technique

<b>Population Category</b>	<b>Target</b>	<b>Percent (50%)</b>
Managers	15	14
Supervisors	30	29
Customer care executives	60	57
<b>Total</b>	<b>105</b>	<b>100</b>

### **3.4 Data Collection Instruments**

The instruments that was used for data collection was structured self-complete research questionnaire that was administered to the sampled population and then collected after a few days.

### **3.5 Pilot Study**

A pretest was done on the structured ended questionnaires to determine their reliability and validity to the study. Specific questions were incorporated in the questionnaires which aimed at capturing specific information from the respondents. These preliminary questionnaires were sent to 15 employees of Telkom Kenya to fill in and send them back for evaluation and the participants involved in pretest did not be part of the main study.

#### **3.5.1 Validity**

Validity can be described as the extent to which the instrument measures what it purports to measure (Jankowicz, 2005). Validity concerns the accuracy and meaningfulness of inferences which are based on the research results (Bryman& Cramer, 2005). A pilot test was carried out to evaluate face and content validity of the instrument. Face validity deal with the researcher's subjective evaluation of the validity of the measuring instrument, and hence the extent to which the researcher believed the instrument was appropriate.

#### **3.5.2 Reliability**

Reliability refers to the consistency or rather the stability of the scores obtained from tests and assessment procedures. Mugenda and Mugenda (2003) argue that reliability is a measure of the degree to which a researchers' instrument yields consistent results or data after repeated trials.

### **3.6 Data Collection Procedure**

Data was collected mainly from primary source. Questionnaires were employed for the collection of primary data from the selected employees in the chosen departments. A set of logical written questions were administered to selected individuals. There was single set of questionnaire that used for both member of management and other respondents.



### 3.7 Data Processing and Analysis

This is the process of gathering, modeling and transforming raw data with the goal of highlighting useful information, suggesting, conclusion and supporting decision making (Kothari, 2009). Then results were presented using percentages, frequency distribution tables, line graphs, bar graphs and pie charts. Data analysis and presentation were concerned with editing, coding, classifying, tabulating and charting and diagramming research data. Quantitative analysis was used.

## RESEARCH FINDINGS AND DISCUSSION

### 4.1 Presentation of research findings

#### 4.1.1 Response rate

The aim of the researcher was to establish the actual number of the respondents that took part in the study. The findings were presented on the table.

Table 4. 1: Response rate

Category	Frequency	Percentage
Response	100	95
Non-response	5	5
<b>Total</b>	<b>105</b>	<b>100</b>

It was established that 95% of the total sampled respondents while 5% did not respond to the study. The percentage of those who respondent is a good representation of the population since it is more than 50% of the total sample (Zikmund 2013).

#### 4.1.2 Gender of the respondents

The aim of the researcher was to find out gender of the respondents in the study and the obtained findings were presented on the table;

Table 4. 2: Gender of the respondents

Category	Frequency	Percentage
Male	42	42
Female	58	58
<b>Total</b>	<b>100</b>	<b>100</b>

The study results indicated that female were more at 58% than male respondents who were at 42%. There is need for the study to meet the 1/3 gender rule in the representation (Kenya constitution 2010). The gender rule was well fulfilled in the study.

#### 4.1.3 Duration worked in the organization

This was to determine the length of time respondents had worked in the organization and the results were presented on the table as shown;

Table 4.3: Duration worked in the organization

Category	Frequency	Percentage
0-2 years	16	16
3-5 years	55	55
5 and above years	29	29
<b>Total</b>	<b>100</b>	<b>100</b>

It was determined from the study that those respondents who had worked between 0-2 years were at 16%, between 3-5 years were at 55% and those 5 years above were at 29%. The duration of service of the respondents in the relevant study establishes the knowledge and experience in the field which provides the needed information for the study for reliability (Cooper & Schindler, 2011).

#### 4.1.4: E-recruitment

##### 4.1.4.1 Company website for e-recruitment

This was to establish whether the company website enhances e-recruitment or not and the study results were presented on the table;

Table 4.4: Company website for recruitment

Category	Frequency	Percentage
Yes	71	71
No	29	29
<b>Total</b>	<b>100</b>	<b>100</b>

It was clear from the study results that the company website enhances e-recruitment for the desired staff according to 71% while 29% did not agree to this.

##### 4.1.4.2 E-recruitment on applicant tracking

The study aimed at determining whether use of e-recruitment ensure better applicant tracking during hiring process to employ the suitable person for the duties outlined or not. The results were presented on the table as shown;

Table 4.5: E-recruitment on applicant tracking

Category	Frequency	Percentage
Strongly agree	30	30
Agree	42	42
Disagree	18	18
Strongly disagree	10	10
<b>Total</b>	<b>100</b>	<b>100</b>

The study established that use of e-recruitment ensure better applicant tracking during hiring process to employ the suitable person for the duties outlined according to 72% who agreed while the remaining 28% of the respondents did not agree.

#### 4.1.4.3 E-recruitment on hiring decisions

The aim of the researcher was to find out the extent at which e-recruitment enhances hiring decisions by human resource management for effectiveness. The data obtained was tabulated on the table as shown;

Table 4.6: E-recruitment on hiring decisions

Category	Frequency	Percentage
Great extent	55	55
Normal extent	28	28
Less extent	10	10
No impact	7	7
<b>Total</b>	<b>100</b>	<b>100</b>

The study established that e-recruitment enhances hiring decisions by human resource management for effectiveness to a great extent according to 55%, normal extent at 28%, less extent at 10% and no impact at 7%.

#### 4.1.5 E-training

##### 4.1.5.1 E-training for reliable mentoring and couching

The study sought to establish if e-training provide reliable mentoring and couching necessary for acquisition of necessary skills or not. The tabulated data was presented on the table as shown;

Table 4.7: E-training for reliable mentoring and couching

Category	Frequency	Percentage
Yes	64	64
No	36	36
<b>Total</b>	<b>100</b>	<b>100</b>

The researcher established that 64% of the respondents agreed that e-training provides reliable mentoring and couching necessary for acquisition of necessary skills while 36% did not agree to this.

##### 4.1.5.2 E-training on extra training to employees

The researcher sought to explore if e-training provides extra training to the employees than other platforms of training in the organization or not. The findings from the study were presented on the table;

Table 4.8: E-training on extra training to employees

Category	Frequency	Percentage
Strongly agree	22	22
Agree	20	20
Disagree	33	33
Strongly disagree	25	25
<b>Total</b>	<b>100</b>	<b>100</b>

The study indicated that 42% agreed to e-training providing extra training to the employees than other platforms of training in the organization while 58% did not agree to this.

#### **4.6 Limitations of the study**

There was reluctance of some of the employees in responding to the study especially the customer care representatives since they felt threatened that the research may expose them to the management or the authority on how they serve customers therefore fearing the questioning of their competence and other related factors.

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Summary of findings**

The results indicated that those between 18-23 years were at 15%, between 24-30 years at 32%, between 31-40 years were at 40% and those above 40 years were at 13%. The target age distribution for the study should be represented to ensure an all-inclusive and authentic study (Rubin, 2012). The study met this threshold. The study results indicated that female were more at 58% than male respondents who were at 42%. There is need for the study to meet the 1/3 gender rule in the representation (Kenya constitution 2010). The duration of service of the respondents in the relevant study establishes the knowledge and experience in the field which provides the needed information for the study for reliability (Cooper & Schindler, 2011).

##### **5.1.2 E-recruitment**

It was clear from the study results that the company website enhances e-recruitment for the desired staff according to 71% while 29% did not agree to this. The study established that use of e-recruitment ensure better applicant tracking during hiring process to employ the suitable person for the duties outlined according to 72% who agreed while the remaining 28% of the respondents did not agree. The study established that e-recruitment enhances hiring decisions by human resource management for effectiveness to a great extent according to 55%, normal extent at 28%, less extent at 10% and no impact at 7%.

##### **5.1.3 E-training**

The study established that 64% of the respondents agreed that e-training provides reliable mentoring and coaching necessary for acquisition of necessary skills while 36% did not agree to this. The study indicated that 42% agreed to e-training providing extra training to the employees than other platforms of training in the organization while 58% did not agree to this.

#### **5.2 Recommendations**

##### **5.2.1 E-recruitment**

Organizations planning to recruit personnel should use the company website so as to get the desired staff for the work needed. During hiring process, organizations should use e-recruitment in the process to track and hire suitable individuals for work prescribed by the organization. The human resource management can make better decisions during hiring by use of e-recruitment and therefore this should be their priority.

### 5.2.2 E-training

For the organization and especially the human resource department to have reliable mentoring and coaching, e-training should be embraced for acquisition of necessary skills for the prescribed duties. Though e-training is reliable, it should not be the only platform used since it does not necessarily provide extra training than other platforms.

### 5.3 Conclusion

On e-recruitment, it was concluded from the study that the company website enhances e-recruitment for the desired staff. Also the conclusion noted that use of e-recruitment ensure better applicant tracking during hiring process to employ the suitable person for the duties outlined. It was clear from the conclusion that e-recruitment enhances hiring decisions by human resource management for effectiveness to a great extent.

On e-training, the study concluded that e-training provides reliable mentoring and coaching necessary for acquisition of necessary skills. It was also concluded that e-training does not necessarily provide extra training to the employees than other platforms of training in the organization.

### REFERENCE

- Ambira Cleophas and Kemoni Henry, (2014), Records management and risk management at Kenya Commercial Bank Limited, Nairobi : original research. South African Journal of Information Management
- Armstrong, M. (2012). *A Handbook of Human Resource Management Practice*. 11th edition, London.
- Aronson, K.R., Laurenceau, J.P., Sieveking, N., & Bellet, W. (2015). *Job satisfaction as a function of job level*. Administration and Policy in Mental Health Services Research, 32(3), 345-91.
- Barron, M., Chhabra, D., Hanscome, R., & Henson, R. 2004. Exclusive Panel Discussion: Tips and Trends in HRIS. HR Focus, 81(5): 6-7.
- Beardwell Ian, Holden Len, (1997), Human Resource Management: A contemporary perspective, pitman publishing, Cambridge.
- Bhattacharyya, D. K. (2014). Talent Development Process of CPSEs: A Reflection on Practices and Requirements. *Journal of Institute Of Public Enterprise*, 37(3/4), 91-99
- Brien, O. (2008). *Introduction to information systems, (12 the ed.)*. Tata McGraw-Hill, 242-243.
- Buechler, G. (2010). *How employers are using LinkedIn for recruiting*. Human resources about.com.
- Chumo Mercy Chelangat, (2014) relationship between human resource information systems and staff development among international non-governmental organizations in Nairobi, Kenya
- Cole, G. A. (2002). *Personnel and Human Resource Management (5th Ed.)*. Continuum London: New York Publishers.
- Collings, D. G., & Wood, G. (2009). *Human resource management: A critical approach*. In D. G. Collings & G. Wood (Eds.), *Human resource management: A critical approach* (pp. 1-16).
- Cooper and Schindler, C. R. (2011). *Research methodology: Methods and techniques. (3rd ed.)* New Delhi: New Age International
- Ellis, R. A., Jarkey, N., Mahony, M. J., Peat, M., & Stephen, S. (2014). *Managing quality improvement of eLearning in a large, campus-based university*. Quality Assurance in Education.

- Fayyazi Marjan Zahra Afshar (2015) Investigating the barriers of the green human resource management implementation in oil industry. *International Journal of Industrial Engineering Computations* 5(1):101-108
- Galanaki, E., (2012). *The decision to recruit online: Descriptive Study*. CAREER Development International, Vol.7 No.4, pp 243- 251.
- Girard and Fallery (2009), E-recruitment: new practices, new issues. An exploratory study, ResearchGate
- Gueutal, H.G., & Stone, D. L. (2015). *The Brave New World of eHR: Human Resources Management in the Digital Age*. Jossey-Bass, San Francisco, CA.
- Harrison, R. & Kessels J.W.M. (2014). *Human Resource Development in a knowledge economy. An organizational view*. Hampshire – New York: Palgrave Macmillan. (301 p.) (ISBN: 0- 333-99015-3)
- Harcourt, M. & Gibb, J. (2013). *Online social networks: an emergent recruiter tool for Attracting and screening*. Emerald group publishing limited. Vol.42 No.3, pp 248-265.
- Johnason, P. (2009). *HRM in changing organizational contexts*. In D. G. Collings & G. Wood (Eds.), *Human resource management: A critical approach* (pp. 19-37). London: Routledge.
- Kanini, R. (2008). Implementing strategic information systems in commercial banks in Kenya, University of Nairobi.
- Kavanagh, M. J., Gueutal, H. G., & Tannenbaum, S. I. (1990). *Human resource information systems: Development and application*. Boston, Massachusetts: PWS-KENT Publishing Company.
- Kothari, C.R. (2009). *Research Methodology: Methods and Techniques*. New Age International
- Kotler, P. and Keller, K. (2006) *Marketing Management*. 12th Edition, Prentice Hall, Upper Saddle River.
- Ludwig Von Bertalanffy (1967) *General theory of systems : Application to psychology, Foundations, Development, Applications Revised Edition*
- McCrindle, M. (2009). *New Generations at Work: Attracting, Recruiting, Retraining & Training Generation Y*. McCrindle Research, Sydney
- Mugenda, O.M and Mugenda, A.G (2003). *Research Methods, Quantitative & Qualitative, Approaches, Acts Press, Nairobi*.
- Neuman, W.L. (2007) *Basics of Social Research Methods: Qualitative and Quantitative Approaches*. 2nd Edition, Allyn and Bacon, Boston
- Nishad N. (2012). Time & cost savings advantages with usage of human resource information system in select software companies in Bangalore City. *Indian Journal of Applied Research*, 1(12), 161-163.
- Nishad N. (2014). Human resource information system as a tool for effective decision making in select software companies in Bangalore, Karnataka, India. *International Journal of Business and Management Review*, 2(1), 90-107.
- Nyakoe Nyang'au Enock (2014) impact of information and communication technology on kengen's performance
- Pfieffelmann, Wagner & Libkuman, (2010) Recruiting on Corporate Web Sites: Perceptions of Fit and Attraction, Article in *International Journal of Selection and Assessment* 18(1)
- Sahaya, P. (2014). Design thinking in talent acquisition: a practitioner's perspective. *Strategic HR Review*, 13(4/5), 170 – 180.
- Sadri J, & Chatterjee, V. (2013). *International Journal of Human Resources Development and Management*: Inderscience Publisher
- Steve L. Adams, Steve L. Adams (2015). Employee Channel SAN FRANCISCO. *Human Resources Management in Perspective journal*.
- Troshani, I., Jerram, C., & Hill, S.R. (2011). Exploring the public sector adoption of HRIS. *Industrial Management & Data Systems*, 111(3), 470-488.
- Vick, B., & Walsh, D., (2010). *Happy about LinkedIn for Recruiting*. [www.happyabout.info/linkedin4recruitng.php](http://www.happyabout.info/linkedin4recruitng.php).